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the EDITOR'S notebook

DAVI Comes Out For Federal Support

READERS will recall that last month on these pages we appealed to DAVI members to make known their applause of the Senate for its passage of the McNamara Bill. We suggested you write to your Congressman praising the Senate action and asking pointblank for a like performance in the House.

In view of our present and past efforts in this direction, the national staff is gratified to report that DAVI has gone on record for federal support—as expressed in the Ninth Resolution passed in Cincinnati, to wit:

"Be it resolved that the Department of Audiovisual Instruction call widespread attention to the urgent need for financial support of education for both capital outlay and current operating expenses. The Department rejects the viewpoint that federal support must be accompanied by federal interference with state and local autonomy in education. . . ."

We are also happy to report that the McNamara bill looks even better now from our point of view—thanks to surveillance by Don White and his Washington staff. We refer to the AV amendment reported on page 122.

De Bernardis Seeks Sources

We have a note from Don White commenting on the project headed by Amo De Bernardis reported on page 124. This is a Title VII dissemination project to be executed under the auspices of the Division of Education of the Portland State College. It entails the preparation and publication of a guidebook for architects stating the audiovisual requirements for new school buildings—light control, ventilation, storage, and so on. Dr. De Bernardis urgently needs the names of architects who have planned schools for efficient audiovisual use; he needs photos of such schools and all available descriptive information. He would also like to have samples of specifications for installations and all other information which will be helpful as background material.

Dr. De Bernardis can be reached through the Portland (Oregon) Public Schools where he is assistant superintendent of schools.

A General Memorial

We call your attention to the notice below announcing the first Helen Rachford Memorial scholarship. The Helen Rachford Memorial Fund Committee met during the Convention and recommended that the name of the Fund be changed to the Department of Audiovisual Memorial Fund and that a suitable plaque be prepared identifying the fund and noting its beginning. The Committee also suggested that a book be started in which the history and chronological development of the memorial fund be kept. If upon the death of a DAVI member, contributions to the fund in his name were received, the name would be inscribed in the book.

Coming In May

"Organizing for Audiovisual Services" will be AVI's theme next month with some new authors and some repeaters. Among new names are Roy Frye, Roswell (New Mexico) Public Schools; James Kinder, San Diego State College, and Maurice Williams, Tacoma (Washington) Public Schools.

Wes Grabow, University of Minnesota, Clifford Costley, Oklahoma City Public Schools, and Ray Wyman, University of Massachusetts, are all former contributors.

UNESCO Materials

If you are interested in free materials on UNESCO, write for the folder, *UNESCO at Your Service*, from Public Liaison Division, New York Office of UNESCO, Room 2201, United Nations, New York.

Applications Now for Rachford Scholarship

The Helen Rachford Memorial Scholarship Committee will award a $500 scholarship for graduate work in audiovisual education to a deserving student this spring. If you would like application blanks for this scholarship, please address requests promptly to Robert C. Snider, DAVI, 1201 Sixteenth St., N.W., Washington 6, D. C.

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Please Sign Manuscripts

Whether you are submitting an article or reporting a state activity, please sign your manuscript. Acknowledging your authorship in an accompanying letter is not enough; often the two become separated—sometimes in this office—and it is impossible for us to print news without a source.

Airborne ETV Delayed

That $7-million Stratovision experiment with educational television planned by the Midwest Council on Airborne TV Instruction won't get off the ground by the start of school next fall. The target now is midwinter. Reason: simply too tight a schedule for everyone.

Another change: No ground-to-air transmission. Instead, video-tape recorders will be carried aloft and all transmissions will be air-to-ground. It was decided that the ground-to-air transmissions would be costly, troublesome, unnecessary, and likely to produce interference. The plan is to use a DC-7 plane orbiting in a 10-mile circle 23,000 feet above Montpelier, Indiana, 140 miles from Purdue University where the activities are centered. UHF will be employed. —*Weekly Television Digest.*

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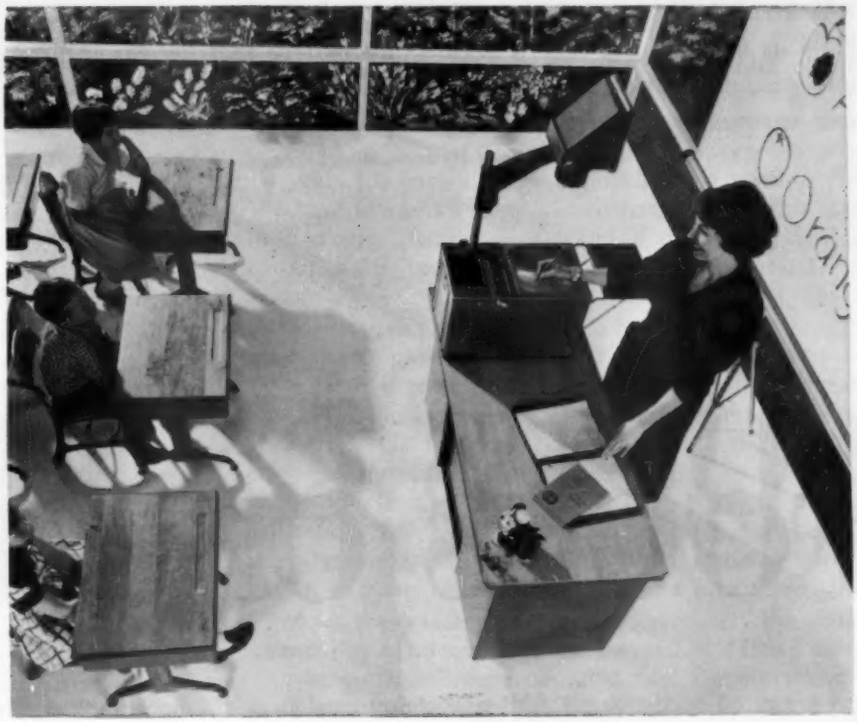

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These are the words of Ernest O. Melby as he addressed the DAVI Convention in the keynote session March 1—deceptively simple words which convey ideas as rich as the speaker's language is plain. We offer them as a permanent record because we believe that here is inspiration and guidance which our readers can apply to every facet of school and community life.—The Editors.

Ernest O. Melby

FOCUS ON VISION

FOCUS ON VISION

TO SPEAK OF VISION to a DAVI convention may seem like bringing coals to Newcastle, for have not the audiovisual teachers and leaders sought constantly to bring a larger and more meaningful world into focus for the purpose of extending the vision of youth and adults? But today I want to use the word vision in a different sense, namely that of imagination—that of the capacity to *see* and *see more* not only of what now *is* but also to project at least part of what is not yet fully seen. I do this because it is daily becoming more apparent that unless men can be educated in vision—in the realm of imagination—their future is dark indeed.

Ours is indeed an age of paradox. Science has promised to liberate man from hunger, disease, and the force of the elements and bids fair in addition to surround men with hitherto undreamed-of luxury and comfort. Yet atomic man lives in mortal fear of annihilation. Here in America where we have unmatched conditions in the way of resources, both natural and human, a pervasive gloom gives cynicism to our artists and intellectuals, a high incidence of mental illness to our population, and a general dampening of our creative spirits, leading us to inaction on the public front.

Although we have one of the oldest democratic governments, an incredibly rich tradition of human values and freedom, as well as remarkable achievements in bringing well-being to humanity, we are fear ridden and hesitant in our leadership both at home and abroad, even to the point where we wonder if we can compete successfully with the Communist nations. The current widespread concern over the claimed missile lag indicates the degree to which people pin their faith on arms alone and fail to sense the true nature of the struggle we are in.

I hold our current pessimism to be unjustified. We are at the opening of a decade that could be the greatest in our history if we but had the vision to sense our opportunities, the conviction and courage to maintain them, and if we would move forward with educational, social, economic and political programs designed to express our historic outlook in action.

Were I historian instead of teacher I might begin this morning by tracing the steps whereby man has passed through the ancient, medieval, and modern eras. I might conclude as some have done that the modern era came to an end in 1914. But since my present focus is on education, I prefer to end modern history in 1943 when Enrico Fermi, having produced a chain reaction in a carbon pile under the stadium at the University of Chicago, sent a cryptic telegram reading, "The Italian navigator has arrived in the new world." He might well have said, "A new world has arrived." For since that day we have been living in a new world, the full meaning of which we have not yet envisioned.

But if we will only think, you and I know that this new world is characterized by new and terrifying concepts of energy, new possibilities in communication and transportation, even extending to outer space; new possibilities for the improvement and enrichment of life; new concentrations of population as well as a threat of overpopulation; new possibilities in economic production, to say nothing of our having to live under the Damoclean sword of atomic fire.

The social, economic, political, and ethical problems arising from this fantastic new world are so baffling that to many people they are overwhelming. Perhaps it is in this situation we find the root of the apathy of atomic man. He is mortally afraid of annihilation but he cannot face the complex and to him baffling task of bringing about his own survival. So he salves his conscience by saying he can't do anything about it and loses himself as an organization man in the lonely crowd, piling shiny gadget upon shiny gadget and living

more and more in a world of self-delusion and self-gratification. By such a process we rapidly convince ourselves that affluence is greatness and every year push our most annoying problems under the rug, cherishing the desperate hope that mistakes of the Russians or Chinese will somehow bail us out.

Perhaps the final pay-off for our lack of vision is that, having lived for 15 years in fear of atomic war we must now literally live in fear of what peace will do to us. I have just seen a group of economists prove with carefully presented data that the Soviets are likely to overtake us in economic production by 1972. They are ahead of us in the space race and every year that passes appear to be gaining on us in their appeal to the underdeveloped world. What if we have 50 years of uneasy peace? Certainly if the Soviets continue as they are developing and we continue to behave as we are behaving they are going to win. And if totalitarian slavery wins in the world we shall have betrayed freedom by our own lack of vision, lack of dedication, and head-over-heels immersion in materialism.

We utilize so little imagination we let our opponents exercise their imaginations in constantly confronting us with new moves to which we react often hurriedly and ill-advisedly. We exercise so little imagination we are not developing a strategy for peace even though such a strategy is our only reliable means not only for survival but for the fullest development of freedom.

In domestic affairs the acute lack of vision we exhibit is shown by our fear of what might happen if defense expenditures should prove less necessary. If we used our imaginations we would know that in slum clearance and urban renewal alone we could use all the money we now spend on defense and we would not run out of projects for a hundred years. Our lack of imagination keeps much of our governmental machinery well nigh unworkable in a dynamic economy in a technical age. We have so little vision we cannot see that our failure to give more money and attention to education is weakening every aspect of our lives from the family to international affairs.

Our failure to exercise imagination becomes the more saddening when we discover that this failure is also responsible for the dominating personal and social gloom of our day. Henry A. Murray, professor of clinical psychology at Harvard, puts it as follows:

> We are all familiar with the symptoms of distress, alienation, and resentment burdening certain of the more articulate members of the population, the Ishmaels of our time. But what is the underlying meaning of this great flood of discontent?
>
> An emotional deficiency disease, a paralysis of the creative imagination, an addiction to the superficials—this is the diagnosis I would offer to account for the greater part of the widespread desperation of our time. Paralysis of the imagination, I suspect, would also account, in part, for the fact that the great majority of us, wedded to comfort so long as we both shall live, are turning our eyes away from the one thing we should be looking at: the possibility or probability of co-extermination.

I do not know how large our margin of error is, how long we can continue the purposeless character our society has exhibited in the last decade. But there is one fact we cannot overlook. It is the fact of change —ever more rapid change. Yesterday's facts do not hold today, last year's concepts of the world about us are only partially true today. As parents we are turning over to our children a society we do not ourselves understand, for our own education had as its *piece de resistance* not the society of our day but that of another age. People of my age have in their lifetimes witnessed more change in the way men live than occurred in human history up to 1900. In the next 10 years life may change as much as in the last 50. We have reached a tempo in civilization in which man in a single lifetime lives through changes which in earlier times took hundreds and even thousands of years.

How is man to be equipped to live under such rapidly changing conditions? Clearly if our education is based on what is extant today, it will be out of date tomorrow. Yet life is changing so fast we don't know what tomorrow will be like. At first thought this appears to be an insoluble dilemma, but I do not believe it really is. It appears insoluble only because we see education with either no vision or tunnel vision. We have neither applied imagination to education nor education to imagination. But it was not ever thus.

More than 150 years ago Jefferson felt the indispensability of education to the survival of a free society. But he could not have expected that a century and a half later the freedoms he helped to implement would hang by so narrow a thread. He could hardly have glimpsed the complexities of the atomic age nor the difficulty of convincing the American people of the true road to survival for freedom. Yet the plain truth is that a great education is today our primary means to survival and the chances are if we don't get such an education and get it pretty soon, freedom as we now know it will not survive.

You may well ask at this point what do I mean by a "great education?" I mean an education that helps everyone to become all he is capable of becoming—an education with a curriculum attuned to the atomic age, an education that utilizes the fruits of science in reaching the minds and hearts of young and old, one that both uses and fertilizes community resources. I am talking about an education so exciting to give and to receive that our young people would crowd the doors of our teacher education institutions and so dynamic in action that our people would be eager to invest in it.

Such an education would cost many times our present inadequate effort but would be easier to finance because it would be so exciting to our people that they would want a part in it. But we cannot support an adequate educational system in our kind of society without substantial help from the Federal Government. The sooner we sense this and make the Federal Government a partner in the educational enterprise the better. We have already wasted precious time in silly argument that has served no one except those who do not want to spend more for education.

I believe that if we are to have a great education we must apply imagination to at least five aspects of education—the program, the teacher, the community, the techniques, and finally the means for securing moral and financial support. I would like to discuss these five aspects briefly but in reverse order.

Investment in Imagination

Everybody assumes it takes imagination to make money—to create wealth—but few consider that money properly spent can stimulate and cultivate imagination. Most of the money spent on imagination—on research—is on technology, or on ways to make money. Little is devoted to human relations, to the stimulation of imagination itself or to the application of imagination to human problems. We can spend anything from $3,000 to $20,000 a year on the education of a doctor but deplore spending $1,000 a year on the education of a teacher. Also we can lose ourselves in luxurious living while hundreds of millions go to bed hungry every night. We can ride on superhighways and take note of what can be done by a partnership of Federal and state governments and while enjoying the results of this partnership, deplore a similar partnership in education.

If we used our imaginations instead of our prejudices we would realize that Federal support would strengthen rather than weaken local support. I saw this happen in Minnesota 40 years ago when state aid created a new climate of interest and action in education at the local level. Not only would Federal funds energize people locally but the improved education would in turn by its very dynamism fire the imagination of people in local communities. Investment in education is investment in imagination. It comes from and leads to a focus on vision.

Mobilizing the Community

Nowhere is lack of vision in relation to the development of imagination more apparent than in American communities. This lack of imagination is shown by laymen and educators alike. Both groups fail to realize the vast resources that could be mobilized for education in every community. Both tend to overemphasize the role played by schools and to underemphasize other community forces. Both groups fail to see that our mass media are shaping the thinking and feeling of people against the use of imagination in attacking the community problems. Among other things these mass media through high pressure advertising are making our people more materialistic and more reluctant to have their money spent for public purposes. Yet it is through public expenditures that much of our national strength must be attained.

I cannot help but feel it is a national disgrace that our symphony orchestras and opera groups are not maintained by the public. Our slums are an even worse disgrace, and without heavy public expenditure for slum clearance and urban renewal the remedial process is far too slow. Public buildings, including school plants, go unused great portions of the day and year because we lack the funds to keep them open. But we have to pay interest on the investment whether the facilities are used or not. We deplore juvenile delinquency and expand the police force to deal with it, but we do little to cope with the conditions which produce youthful involvement in crime.

Our political processes falter because of an uninformed and apathetic public—yet we fail to provide the funds for adult education.

Split-Level Living

Herblock in *The Washington Post*

Techniques, People, and Money

Our pre-occupation with things, money, and technical processes causes us to forget that fundamentally all we have to work with is people. People live in some kind of community. If we want people to grow, to get new vision, and to create a better society, we must bring people, community resources, money, and new techniques together in a unified community, state, regional, national, and world educational effort. We have all the ingredients for this effort. All we need is imagination to relate them to one another.

In Fourth of July speeches we extol freedom but what does our freedom mean if we do not use it toward a better life? What does it mean if our slums grow, juvenile delinquency increases, political apathy abounds, and our international relations lack imagination and initiative?

We need an orchestration of community resources, the educational fruits of technology and money to make the entire community an educational enterprise. We must help communities to a new vision of their educational challenges. How do we do it? By stimulating people to study their problems together at the community level. They do not consider their local problems long before they are lead to see their national and world meaning. While they are at work improving the life of the community they are themselves learning. Here they can learn using all of our new devices. They have the whole community as a laboratory. What they themselves receive from this learning they will nat-

urally want for their children. The community that is excited about its life is not hesitant to invest in this life and its constant improvement.

Vision and the Teacher

How can it be that as a people we are so indifferent to the key element in education, namely, the teacher? This is because we have not sensed the excitement in learning, and since we see learning as routine and dull we are not disturbed by dull teachers. Since our primary motivation is making money it is understandable that many of us do not want our children to be teachers, especially our boys. Many thought Sputnik would change all this but except for a brief period of talk we drifted back to our lackadaisical, business-as-usual state of mind. More money would help us get better teachers but unless the American people change their value system and measures of success the effect will be small. The moment our young people believe that education is the most important concern of our people we'll have no trouble recruiting competent teachers.

Our teacher education institutions must become live places where learning is fun, where the climate is conducive to the development and application of imagination. The successful teacher has two qualities—he loves people and he loves to learn. The "C" student who is excited about learning will probably make a better teacher than the "A" student who only seeks the "A."

Present college courses do not provide the best means for the preparation of teachers. They are too remote from the prospective teacher himself and too remote from the life of the society in which the teacher will work. In college the student too often feels he is torn between three worlds—his classes, his campus life, and the world of reality outside. He is unable to mobilize these three worlds in his own education. The prospective teacher must see himself as a learner, as one who manages his own learning. The life of a teacher education institution in a university should have the liveliest intellectual climate on the campus. It should have the warmest human relations and the broadest and deepest human sympathies. Only faculty members who themselves find excitement in learning, who love people, who see individual human beings not only as they are but as they may become, can create such a climate. We must see all the new means of teaching as more rapid strides to the building of this creative climate. They should be of such a character that, rather than substitute for imagination they feed imagination and give it more room for growth.

Vision in Program and Policy

The organized bodies of subject matter from which our school and college curricula have been drawn are not always good guides for determining the content of our education. Right now we are becoming aware that we neglect Asia, Africa, and Eastern Europe, the very areas where the drama of history will increasingly be played. Military and political history crowds out social and cultural history and the attention to the structure of government leaves little time to see its human aspects. Music, art, and literature are rarely included in any statement of general education and by and large our teachers themselves are so ill prepared in these areas that their influence with students contributes little to artistic appreciation.

The conservative, let-well-enough-alone attitude of America in 1960 should tell us something of the effect of our past education. We are surrounded on every hand with unsolved problems which threaten our freedoms. They abound in education, housing, urban planning, industry, finance, family, community life, and all aspects of human relations. For two decades we have stubbornly refused to face these problems—we are having too much fun with our gadgets. A hundred years from now historians will no doubt be occupied trying to explain why these problems got no attention while public officials from the President to the small town mayor dwelt on the obvious and on pious generality.

Our education must equip our people to sense the shortcomings of our social arrangements. As a people we should be as eager to find new and better social, economic, and political devices as we are to find new engines to lift man into outer space. It is of course much more important to understand the other side of the earth than the other side of the moon.

I cannot find words to tell you the real tragedy of the gap between the vivid and inspired picture of the world we need and the limited one our education presents; between the depth of human sympathy we must have to survive and the parochial attitudes we generally have and convey; between the excitement of vital learning and the dull, often inert facts our children grudgingly learn only to shortly forget them.

I become even more saddened by this tragedy when I realize that we have everything with which to provide a great education. We have the wonderful children, the people, so much money we lack the wisdom to spend it sensibly, and all these beautiful and arresting means with which you in the audiovisual field work every day to make them more kaleidoscopic. Yes, we have everything with which to save freedom, with which to give new dimensions to human life, with which to usher in a golden age in human achievement. We have everything except the imagination, the human sympathy (which has its roots in imagination), the unselfishness and the awareness of the character of our world that we need not only to survive but to help bring freedom to others.

I repeat, the people are here, the children are here, the money is here, the tools are here in wondrous variety, the challenge to free men is on us with an urgency which paradoxically is at one and the same time frightening and yet inspiring. It is your challenge and mine to focus on vision, to use our imagination, to develop vision in others. For it is the focus on vision in science, the use of imagination in technology which has created the imbalances which make world revolution inevitable. The revolution is in process—make no mistake about it. But what will it bring? Will it be the industry, the slavery, the brutality of the beehive, or the endless creativity, the freedom and the reverence for individual worth basic to a truly free society?

Indi

Recognized among the foremost leaders of audio-visual education in Southeast Asia, G. K. Athalye is director of the National Institute of Audio-Visual Education of India. He holds degrees in science and teaching from the University of Bombay and a master of science degree and Research Diploma from the University of London. He initiated the audiovisual education department in Bombay state and directed its activities until 1955 when he became the UNESCO audiovisual expert to Thailand. He was recalled from that position to head up the Institute described in this article. Francis Noel served as the first American AV expert to the Institute, on assignment by the Communications Media Section of ICA. (See the May 1959 issue page 154 for more on Dr. Noel.)

WITHIN MINUTES AFTER DEPLANING at New Delhi's International Airport, the traveler will see extremes in transportation ranging from the Comet IV (the 500-mile-per-hour jet airliner he has just left) to creaking bullock carts inching along at the same pace they have moved for the past thousand years. This impressive experience is symbolic of India, symbolic of the adaptation and tolerance of a people who accept both the bullock cart and jet airliner as necessary economic units. Symbolic, too, of the contrasts that are India—for more than anything else, India is a land of unbelievable contrasts. These contrasts must be kept constantly in mind if one is to know and understand the land, its people, and its problems.

Metropolitan areas like Bombay, Calcutta, Madras, and New Delhi have modern facilities covering transportation, communication, modern housing, running water and sanitation systems. Villages,* on the other hand, generally lack electricity, paved streets or modern houses which would be at all acceptable by American standards. Most villagers eke out a subsistance from agriculture and handicrafts. Into this predominantly rural scene inject deep-seated devotion to the tenets of five great religions—Hinduism, Mohammedanism, Christianity, Zoroastrianism and Judaism. Introduce into this scene, the 13 officially recognized languages with several dialects for each. Add to this, the educational problems inherent in a society which is four-fifths illiterate, and for a climax combine it with an exploding birth rate. This is the reason why India's national leaders are emphasizing the development of an educational system capable of caring for her increasing millions of children. In this matter, they are mindful of the implications for their nation of H. G. Well's famous words, "Civilization is a race between education and catastrophe."

Despite all this, in our time, India has emerged, since Independence Day, August 15, 1946, from the status of a British colony to that of one of the world's great nations. Without depreciating the magnitude of the tasks ahead, observation and statistics reveal that startling progress has been made toward modernizing the nation through applications of science and technology, and this has been achieved within the framework of a government pledged to the ideological concepts of democracy.

Early Development in AV

Within this atmosphere of technological change, the

* There are 550,000 villages in India. To realize the extent of their frequency, ICA's Gerald Winfield suggests that one think of the farm houses which dot the countrysides of Iowa and Nebraska then imagine that each farm house represents an Indian village

G. K. Athalye / Francis W. Noel

The National Institute Of Audiovisual Education

India TAKES A GIANT STRIDE

National Institute of Audio-Visual Education was conceived and born, having been officially included in India's Second Five-Year Plan. It is difficult to date the birth of the idea, since recognition of its need seemed to emerge from many different quarters at about the same time. As is so often the case, no one person can be given sole credit. The fact seems to be that India has had its share of educators who became convinced that audiovisuals can markedly improve Indian education. Some state governments initiated audiovisual service centers years ago. Bombay, for example, began in 1920! The Central Ministry of Education initiated an instructional film library with services available to schools on a membership basis in 1947.

In addition the Ministry started publication of a professional journal entitled *Audio-Visual Education*. Research projects were also begun. Perhaps the most significant development was the audiovisual seminar in New Delhi in 1954 which for the first time brought together leaders in audiovisual education from all over India. Its success demonstrated the need for others which followed at the local level. It also focused the attention of the Central Ministry of Education on the potentialities of audiovisual education for all of India's schools. This prompted consideration of a governmental agency specifically responsible for audiovisual education. At first it was thought that such an agency should concern itself primarily with the production of materials. Later, plans which were given official sanction and were included in India's Second Five-Year Plan called for an institution which would provide leadership to the movement primarily by offering audiovisual seminars and courses much as American universities and colleges do. Enrollment in such courses would be limited generally to professional staff members of teacher education institutions. Each graduate upon returning to his college or university would act as a catalyst in initiating support for audiovisual education in his institution. Thus, by becoming a "trainer of teacher-trainers," the institute would eventually extend its influence indefinitely as its graduates fanned out to cover all of India.

The idea of production was not abandoned. However, it was to be of secondary importance, developing through research and training programs, prototype instructional materials, which could be readily made of indigenous materials by village craftsmen, teachers, or even pupils. The idea of pupil-made instructional materials was in accordance with Gandhian thought and has a parallel in John Dewey's educational philosophy of learning through doing.

Development of simple prototype instructional devices, as important as it was considered to be, in no way ruled out training in the educational use of technological devices such as instructional films, strip films, magnetic tape recorders, radio and television. On the contrary, it was recognized that such devices would find increasing use in India's schools as the nation moved forward in technical development and it would be equally important for graduates to be skilled in the use of these instruments if they were to keep abreast with progress in the teacher education institutions. It has been especially in this area of the Institute's planning that officials of the United States Technical Cooperation Mission to India have been helpful.

The Idea Takes Root

From the beginning the idea of an institute found favor with TCM (as the U. S. Technical Cooperation Mission is popularly referred to here in India) and plans were finalized for a joint project of the Indian

government and TCM. Briefly the agreement, ultimately approved by both governments, provided for dollar support from the United States for equipment amounting to approximately $200,000. In addition the Americans agreed to provide three audiovisual consultants for a period of two years each. It has now been proposed to revise the latter agreement to arrange for one continuing consultant for the two-year period, supported by short-term consultants selected from leaders in the American audiovisual education movement who will be invited to serve on the Institute's staff for a period of two to three months only. This will make it possible for individuals serving at American universities and other institutions to use a quarter of their academic year on the project.

The Institute Begins

The Central Government of India (CGI) Ministry of Education designated the project as the National Institute of Audio-Visual Education and in January 1959 the authors of this article, G. K. Athalye as the newly appointed director and Francis Noel as U. S. technical advisor representing TCM, arrived in New Delhi to begin the long process of further changing an idea into reality.

In concurrence with recommendations by Shri Athalve and Dr. Noel the Ministry of Education consolidated all of its audiovisual activities, placing them under the supervision of the Institute. These included an instructional film library with more than 4000 prints, a publications unit, a group of researchers and writers and the services of a graphic artist. The entire staff comprises about 50 persons.

Functions of the Institute

As presently conceived the functions of the Institute group themselves into six categories briefly described here:

- *Leadership:* At the national level this implies leadership in ideas, in technical information and know-how, in educational methods for the use of varied materials, in technical and educational research, in experimentation, in some phases of production and in the training of personnel for this specialized field. This also implies working with and through others—individuals, organizations, institutions, and agencies of government.

- *Teacher Education:* The Institute cannot train teachers directly because of the immensity of the task; however, it can and should train those professional staff members of teacher education institutions who work with prospective teachers. An equal responsibility will be to train those individuals who will develop and administer audiovisual education service units in training institutions.

- *Research:* Among anticipated areas are survey investigations, curriculum research, utilization research, production and technical research and radio-TV applications to education.

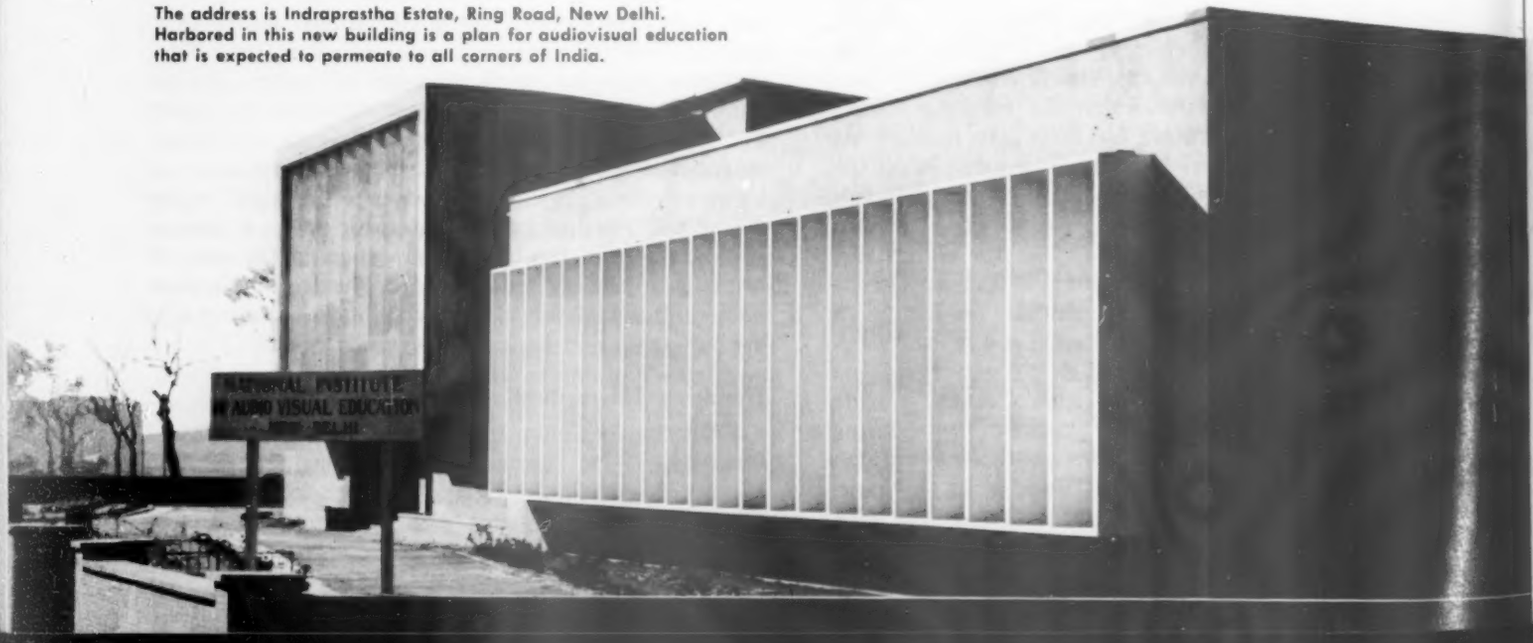
- *Production:* A long-range, carefully planned, but flexible production program is needed in the fields of non-projected aids, teaching helps, projected aids, radio, tape recordings and educational television. The program will likely consider which visual and audio aids can best be made by state or local units and which can best be produced by the Institute. It should also consider ways to assist private industry and other public agencies in the production of needed materials, particularly the materials and devices that can be produced with indigenous materials by village craftsmen and in village schools by both teachers and pupils.

- *Film Library and Distribution Service:* The present film library will need to provide progressive leadership in the development of similar but independent libraries in states, cities, and regional centers. It may also be expanded to handle distribution of non-circulating materials.

- *Consultation and Information Services:* These are implicit in every function of the Institute—group meetings, individual communications, regional and national conferences, and perhaps field workers.

If the Institute develops as anticipated, it will serve as a directorate of audiovisual education for all of India, and through its program, should exercise a high degree of influence in the development of this field in India. In so doing it should also aid in stimulating audiovisual education throughout South Asia.

The address is Indraprastha Estate, Ring Road, New Delhi. Harbored in this new building is a plan for audiovisual education that is expected to permeate to all corners of India.



DAVI INTERNATIONAL? | *A Convention Postscript*

WHAT IS DAVI's international role? The question seems trite but in reality is a tremendously important one weighing heavily on the national staff for some kind of clarification. Should DAVI embrace the ambitions of its more ardent internationalists to become a full-fledged international organization with stepped-up exchange and clearing house activities, and conventions taking the form of international forums? Or does it remain primarily a North American organization funneling its know-how through international agencies already in existence?

A majority of the membership, Dr. Hyer feels, inclines toward the homefront. Judging from indicated preferences for Convention programs and magazine coverage the interest seems to center more on national, state, and regional problems, less on international ones. Still the other stays with us, as is pointed out by major speakers everywhere and particularly at the DAVI Convention last month. National and international concerns have become so intertwined, education is so huge a factor and the materials specialist so important a protagonist in the competition for men's minds that some attention to the international scene by an organization like DAVI is inescapable.

John Ivey of the Learning Resources Institute, speaking to the second general session in Cincinnati, said that this country's exploding population is only part of the nation's educational burden. Big planning is called for to take care of the domestic front, but this is only part of our responsibility. Granted peace, the United States will be competing with Russia on a world-wide basis for decades to come. The Russians, Dr. Ivey points out, are educating for export, and in order to stay in the running America must also educate much larger numbers than required for domestic consumption.

Pertinent to this problem are the three different stages of societal development around the globe—the African nations where individual and national aspirations are just beginning to stir; transitional societies like the United States and those of Europe where change takes place according to internal dynamics; and planned societies like India, Russia, and China. These three types have different educational needs, Dr. Ivey said, a factor bearing heavily on the numbers we must educate in this country in order to stay in the race for men's minds. (Dr. Ivey's other remarks will be reported more extensively in the Convention Report to appear in June.)

Edgar Dale who addressed his comments in the last general session to the topic, "Avenues of International Cooperation," suggested a four-point program for a "two-way exchange" based on the deliberations of the DAVI Committee on International Relations, namely:

1. An exchange of audiovisual information which would operate as a clearing-house function.

2. An exchange of audiovisual materials.

3. The training of audiovisual personnel. Dr. Dale left most of the discussion of this point to ICA members on his panel, commenting only that "the basic training involves getting into the other fellow's shoes, not only seeing his own customs as he sees and feels them but seeing our customs from his point of view." (This is a tough assignment, Dr. Dale added.)

4. A project on world-wide literacy. "I strongly recommend," said Dr. Dale, "that in the framework of a world-wide literacy program we make a vigorous, experimental attack on the possibility of the use of film, filmstrip, and radio in either the teaching of reading or in supplementing reading instruction. The value of these instruments in teaching adults to read is not known; it has not been adequately researched. We do know, however, that these electronic tools are enormously valuable in conveying ideas which when combined with reading make a powerful communication tool."

Robert Wagner of Ohio State University carried this point still farther. Appearing on Dr. Dale's panel he left two interesting thoughts based on his experiences in Latin America. Dr. Wagner said that fundamental education (with which ICA has largely been concerned in the underdeveloped countries) is no longer as "fundamental" as might be expected. It now embraces high-level concepts such as inflation which Dr. Wagner said can be effectively communicated through the mass media. He gave as an instance the inflation concept taught to Bolivian tin miners through cartoons. His second observation has to do with the reverse chronology in which primitive peoples become aware of the encroaching world—they see a plane before they see a bulldozer; they see a bulldozer before they see a truck, and a truck before a jeep. In the same order they are introduced to radio and perhaps television before they see a book. Indeed the ICA people are now talking about "leaping the illiteracy barrier"—educating people without benefit of print.

Erich Bauer who will report in the June supplement on these international sessions at the Convention has his own plan for DAVI participation in world educational problems. Dr. Bauer thinks that through an exchange of information and materials, audiovisualists in the United States and European countries can in effect form a partnership to bring education to underdeveloped countries via the AV media.

The Convention made clear that regardless of what role DAVI assumes, the organization cannot ignore the experiences of its members abroad. Robert Wagner's remarks, for example (as well as Dr. Ivey's), have direct implications for training audiovisual personnel—one of DAVI's top concerns this year, as witness the three-day invitational seminar running concurrently with the Convention sessions. Dr. Wagner's "reverse chronology" should provide a ripe field for research on the teaching potential of audiovisual media when applied pure.—A. F.

ETV's FORGOTTEN LEARNER

Duaine C. Lang

IS IT POSSIBLE that in our excitement over the educational potential of television in the classroom we have overlooked the most important learner of all—the regular classroom teacher? The purpose of this article is to examine the possible benefits of television for the teacher as a learner and to detail the steps that must be taken to insure that the maximum value of ETV will be recognized by the classroom teacher.

Assuming that future methods of presentation in ETV will resemble the research projects and experiments currently in progress we can look forward to a common practice in which carefully selected teachers are employed on television for a specified portion of the regular class period, usually 20 to 35 minutes. Once the telecast has been completed the regular classroom teacher is expected to resume his responsibilities with the group. These include implementing what has been seen by assisting in experiments or performing further demonstrations, answering questions, directing research, providing references, organizing group or individual projects, grading papers, and numerous other activities. [It can be added that before the telecast begins the teacher also has the important role of setting the climate for the presentation by introducing materials and preparing the class in other ways.]

An examination of the available literature on the experimental use of ETV discloses immediately that the pupil is the center and source of the hypotheses, findings, and conclusions. This undoubtedly is as it should be and yet in our present concern for the pupil we should not overlook the one person who can most easily and best influence the pupil's educational development, namely the regular classroom teacher. It is he who enriches or stultifies, supplements or detracts, and influences positively or negatively the tremendous potential of educational television. It would seem fallacious to assume that every teacher into whose classroom we may beam a picture is the best teacher that he could or should be. The use of television as an inservice tool for upgrading teachers has not assumed the importance it merits.

It may come as a surprise to some people, even to some educators, to learn that the greatest learning deficiency of teachers themselves is the lack of firsthand experiences. One has only to attend the various educational conventions to be convinced of the popularity of teaching demonstrations.

Once the neophyte begins teaching, he has seen his last teaching demonstration unless he continues in graduate work or observes the demonstrations men-

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tioned above. And too often, if the college professor is the demonstrator there is very little in the way of materials and techniques that can be applied in an elementary or secondary teaching situation. Writers of methods books try to remedy this lack of instructional knowledge on the part of the teacher by describing "how to do it." Many teachers regard such books, and even the courses taught from them, as theory. They hesitate to try methods they have only read or heard about because they frequently lack self-confidence. They want to see a method used, to participate in an experiment, before attempting it on an individual basis.

Educational television can help to satisfy both of these requirements. It gives the classroom teacher an opportunity to observe a first-rate TV teacher handling the particular subject and grade level with which he is concerned. It offers the hesistant teacher an occasion to witness the reception and results of the particular techniques on his own students—not on a rigged class of exceptionals that he may suspect are being used in a planned demonstration. The classroom teacher is not merely a passive observer, however. The period following the telecast permits him to continue what the television teacher has begun. One of the merits of this plan is that the classroom teacher can adopt as much or as little of the new technique as he feels is commensurate with his ability and/or personality.

There have been several notable attempts in recent years to permit "observation" among teachers. One commendable though not widespread method is to allow the teacher time during the school day in which to observe fellow teachers, usually in the same subject area and grade level, and also usually in the same building or school system. This practice, however, is hardly universal, and even if it were, there is little reason to suspect that excellence in teaching can always be found merely by going to the next building.

In Continental Classroom we see the advent of instruction for physics and chemistry teachers via the commercial networks on a nationwide basis. While this effort is superior to that mentioned in the previous paragraph, it also has certain limitations. It is superior because the teaching is probably superior to that found on the local level. It is inferior because it is primarily directed at teachers and their fund of subject-matter knowledge. There can be no quarrel with the attempt to improve the subject matter competence of teachers, but while implications for high school teaching are frequently given in the Continental Classroom series, the responsibility for making adaptations to his particular class remains with the viewing teacher. This may be a salutary admission of teaching freedom, but at the same time it might well be remembered that not all viewing teachers are equally competent to make adaptations. Then too, the hour at which the program is shown, while it may give some indication of the viewer's dedication, can hardly be said to be convenient.

The classroom teacher may also profit from the telecast in his own classroom through learning about new materials and resources. He sees them, not merely displayed, as he might at an inservice education meeting, but used in an actual teaching situation. The wealth of materials and resources available in every field of instruction today is so great and changing so rapidly that it has become impossible for any fully employed teacher to keep abreast of advances. TV teachers commonly have time, staff, and financial aid to make use of the latest and best materials and resources, a situation from which the classroom teacher profits in two ways. First, he learns about these supplementary aids and the proper way in which to use them. Secondly, and perhaps of even more importance to him, the use of these new materials and resources by the television teacher often stimulates purchase at the local level. Department heads, principals, and school boards may find it awkward to refuse requests for materials when their need has been so aptly demonstrated to both teachers and pupils, not to mention parents who may have viewed the programs.

Lulled by the Classroom Confines

The two final benefits are closely related. Inspiration and competition should be worthy by-products of educational television for the classroom teacher. All of us have come away from a summer session or convention oration determined that we must and can improve our teaching. Time and distance regrettably have a way of dimming our enthusiasm. Once we find ourselves back in the familiar confines of our classrooms, safe from the exhortations of the "experts," it is only too easy to travel the old paths again—and who questions the teacher in his own domain? Murmurs may be safely voiced in the halls, locker rooms, or teachers' lounge about the merits of a particular teacher, but what pupil or colleague is brash enough to beard the lions or lionesses in their own dens?

Even department heads and principals find it easier to criticize a teacher's mode of dress or his failure to appear at the PTA meeting than his teaching method or subject-matter knowledge. Whether this is due to fear or ignorance is beside the point. The point is that teachers themselves should be their own best critics and they cannot be until they are furnished an objective model upon which to measure their own fitness. The television teacher can be this model. His daily entrance via television can inspire. It can show a better way and establish some healthy standards of competition.

While it is true that the roles of TV and classroom teachers differ, there are many attributes that they ought to share in common. Principals and department heads should not have to urge excellence in teaching manner. The pupils will furnish all the prodding that is necessary in that direction. It should be fairly obvious that the aforementioned benefits will not occur automatically. They have not taken place in many of the current experiments—not because they are impossible to realize, but because of the personality factors involved.

Because the regular classroom teacher frequently regards the TV teacher as an unwelcome intruder—an unwarranted criticism by the school administrators of his teaching ability or as a rival for the attention and affection of his pupils—certain steps must be taken.

(Continued on page 113)

Francis E. Almstead

Raymond W. Graf

TALKBACK/The Missing Ingredient

AMONG THOSE OF US who are viewers of commercial television, there are probably few who have not felt the desire to respond to something we have seen or heard at one time or another. Perhaps we have secretly wished for an "open line" to the studio that would enable us to be heard by the performer, the commercial announcer, the interviewer, the politician, or even the villain. Then, certainly, the annoying passivity that often frustrates onlookers in their living rooms would be removed.

In contrast, if you were to walk into the little red schoolhouse at Munson Corners in Cortland, New York, you would see that school desks have been replaced by television cameras and bright lights, and teachers are talking to cameras. Their pupils are in some or all of the eight public schools connected to the studio by coaxial cable. The children listen intently and watch the teacher on television screens. The teacher cannot see the boys and girls in her class but she follows their reactions with the aid of an audio talkback system which connects all classrooms with the studio.

You might see Mrs. Eleanor Evans teaching music to junior high school students. With the talkback system you might hear children in two different schools, twenty miles apart, yodeling to each other; her classes claim the world's distance yodeling record.

You might hear a student from a distant classroom giving the proof for a geometry theorem while Mr. Burtis, the studio teacher, compliments or corrects the student on his solution.

Or, in Mrs. Bush's fifth grade class, you might hear children from several classrooms miles apart called upon, one at a time, by Mrs. Bush to read from a story.

You are impressed by the way the pupils in distant schools and the studio teacher communicate with each other. The educational communications is achieved by two separate systems—a video circuit using coaxial cable and a talkback circuit using regular telephone lines. Both circuits are rented from the New York Telephone Company. The 25 miles of video cable connects eight public schools in the city of Cortland, Truxton and Virgil. This is an experimental system principally financed by the New York State Education Department as one of its projects for studying effective utilization of television.

The teaching-learning experience 3000 years ago was carried on by dialogue between two persons. Later, when there were more pupils than teachers, new forms of communication were introduced, but in all cases some form of "feedback" from the student to the teacher was found to be essential.

It is reassuring for a pupil to be able to ask questions and to clarify uncertain situations. This reassurance factor is vital for successful learning. It is likewise reassuring for the studio teacher to have student reactions. He can use this for pacing the lesson, for solving problems immediately, and for his own evaluation of class progress.

How Talkback Works

Designed and built by the New York Telephone Company, the talkback system performs efficiently with no more than a flick of a switch and the push of a button, requiring no regular technical assistance. This system is provided on a rental basis at a rate approximating regular home telephone service. Briefly, there are three devices in each of the rooms which are self-contained microphone-speakers. Two of these are suspended from the ceiling; the third is in a position near the classroom teacher or monitor. This last one has a push button on it. When the occasion arises for

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a question or response directed to the tele-teacher, the button is depressed. This action triggers a signal device in the studio.

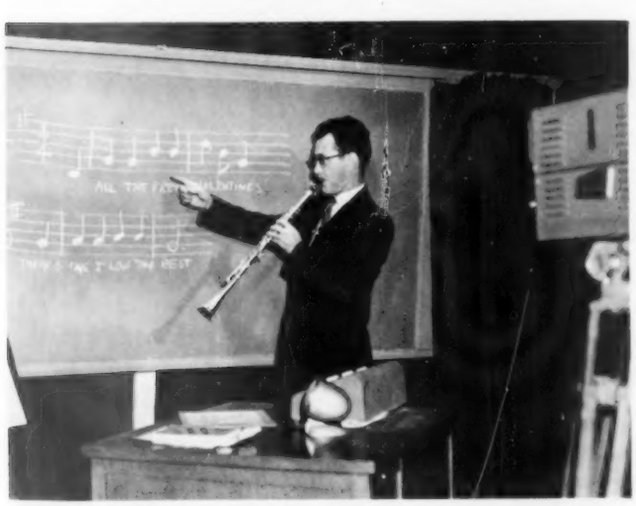
On the tele-teacher's desk and in the control booth there are identical panels of numbered buttons, each one representing a different room on the circuit. When the classroom button is pushed it illuminates a corresponding button on the control-booth panel. When the teacher or the director in the booth depresses the illuminated button the magic occurs. The microphone-speakers in the room instantly become microphones. A red light flashes the "go ahead" signal and the student, seated facing the television receiver, talks to the tele-teacher in normal, classroom tones. In all other rooms viewing the lesson, the microphone-speakers act as speakers through which other students also hear the response. In little more time than it takes for a teacher in a classroom to call on a student to recite, the words of the learner are being carried to the television studio and to other students miles apart, as the lesson progresses.

Group responses or multi-class responses, so important in our television music classes, are readily accomplished by simply depressing several buttons at a time, thereby activating microphones in several rooms. By so doing a large choir is automatically created from small class units.

Why Talkback?

Centuries of educational evolution have not changed the universal axiom that good learning requires good communication from teacher to learner and from learner to teacher. A full learning situation is predicated in large part on immediate two-way communication.

Now that modern electronics has provided the means by which we can extend the necessary interaction between teacher and learner beyond the single class unit, it becomes obvious that we must determine how far. This is one of the goals of the Cortland County Project. In the short space of a year and a half, the talkback device has become an inseparable part of the total concept of instructional television. Experience has shown that a good measure of the credit for the project's successful development of televised instruction can be attributed to the talkback system.



"You sing and I'll play"—Tele-teacher Edward Doyle accompanies singing pupils. He hears their voices through the speaker on his desk. Similar sending instruments are suspended in the classroom.

To be sure, the good lesson tends to stimulate questions which lead learners to thoughtful exploration beyond the content of the lesson. These are questions that may not necessarily be asked of or answered by the teacher during the lesson. Yet, no matter how well the lesson is contrived or executed, there will always be other questions of clarification among the learners. For student security and reassurance, and for good pupil-teacher relations, it is imperative that they have an opportunity to ask these questions and receive answers immediately.

The full impact of this point was felt during the spring semester of 1959, when it was decided to try an experimental program in Spanish using kinescope recordings presented via television. During the introductory lessons in which the material was motivational and rather simple, the students were stimulated and seemed bent on becoming bilingual at an early age. As the lessons increased in content and difficulty, questions of clarification began to arise. Classroom teachers, who had been provided with manuals for the course, filled in where it was possible but the students seemed eager to stop the teacher they were watching and get the clarification from her. When the circumstances were explained and they learned that the tele-teacher was not available for questions, the interest level dropped off sharply to the point where a large percentage of teachers deemed it necessary to suspend the experiment. It was painfully obvious that television students, conditioned to the activity and interaction of the talkback system would not readily accept a less active role.

Aside from the important factors of providing for interaction and student security, the talkback system, we find, produces other desirable side effects. One of these is the great facility offered for correcting an occasional error of omission or commission that even the best teachers sometimes make. Once, for example, Howard Burtis, tenth-grade mathematics tele-teacher, began to diagram a theorem on the studio blackboard which students soon realized was not called for in the assignment. Burtis had turned one too many pages in the plan book and was doing an advanced problem. Before he had lettered the angles, lights from all of his classes in two schools lit up on the talkback panel. After "punching in" one of the rooms, he was quickly alerted to the error.

Before beginning a lesson many tele-teachers will check to see if sight and sound are operating well in all the receiving rooms. Occasionally, a receiver will be in need of an emergency repair. The teacher or monitor in the room may report the receiver failure through the talkback, which brings immediate service from the field engineer. It should be added, though, that since there are two receivers in every regular classroom there is little problem in doubling up on the remaining receiver until the engineer arrives with a replacement.

Not enough can be said for the degree of attention-holding that the talkback provides. It is obvious that

television students must really be on their toes since there is always the chance that they may be called on to recite. We have found that this may not always be one of the best-liked features of learning by television, but it certainly does the trick.

Still another feature of this unique device is that it helps the tele-teacher to pace his lesson and often stimulates him. Teaching to two cameras in a quiet studio, riding distance from the nearest station, is a wonderful, distraction-free experience that no classroom teacher has ever enjoyed; *all* of our tele-teachers recommend it. Yet, without some contact with the learner, the teacher as well as the learner feels himself in a kind of vacuum. Talkback offers a more than adequate solution to this problem. By exchanging greetings with some of the elementary grades or by other types of photic communion with upper grades, the teacher feels brightened and becomes immediately aware of his vast, unseen class in many schools. When a unit of information has been imparted, the teacher will call for questions. Naturally, the presence or absence of questions is an undeniable gauge to comprehension and provides him with a sound basis for teaching rate and emphasis.

Finally, we have found that talkback seems to eliminate most of the irrelevant questions and comments that have plagued teachers from time immemorial. How often does it happen that a teacher must courteously listen to a tale of "my sister's appendicitis," or "I saw this movie Sunday where the guy . . ." and so on. How many valuable moments can be lost from the real task at hand. As would be expected, the talkback device is regarded as something special and not to carry on unimportant communication. It is marvelous to see the discretion with which it is used. I do not imply here that students are frightened of it unnecessarily, but they do treat it with a healthy respect that is refreshing in these days of growing loquaciousness.

Limitations of Talkback

As was mentioned before, one of the goals of the Cortland Project is to determine the optimum class load for television with talkback. So far, we have found no limit. We had as many as 22 classes asking questions during one period when Mrs. Rockefeller visited our installation. We regularly teach 14 class units with as many as 30 students in a class and experience no difficulty. Indications are that we may be able to add more classes with talkback than we had originally thought. The indication that leads us to this belief is the phenomenon of "question duplication." For example, when a teacher calls for questions after a unit of his lesson has been taught, eight or ten of 14 classrooms may signal for questions. After the initial question is asked and answered, we have continually noted a wholesale disappearance of question signals. The conclusion here is obvious: Adding classrooms does not multiply in the same ratio the number of possible questions on a given point; there are just so many clarifying questions that children can ask when the instruction is clear to begin with.

The system of talkback communications has not been researched to the extent of comparing achievement of matched groups during specific lessons. The initial plans which called for this type of evaluation were altered when it was discovered, by observation, that the children lost interest and attention very rapidly when they were deprived of the opportunity to communicate with the tele-teacher.

The results of total teaching in both elementary and secondary school subjects indicate the success that a team of television and "talkback" can achieve. In geometry, results on a Regents examination at the end of the year were as follows:

	MATCHED GROUPS	
	TV	*Non TV*
Percentage passing	85	76
Percentage scoring 90 or above	31	15

NOTE: TV students had no face-to-face teaching even for review during the year. Further, TV students were self-disciplined for 50 percent of the year; a monitor was employed otherwise.

A well-controlled evaluation of reading achievement was conducted by William Sheldon of Syracuse University involving children at Cortland, Truxton, and Virgil who were taught by talkback television and children from Fulton, a comparable district without TV. The results favor television groups, even though Fulton pupils showed higher IQ scores. The results were as follows:

POST TEST RESULTS FOR THE EXPERIMENTAL AND CONTROL FOURTH GRADE GROUPS—IOWA TEST—BASIC SKILLS—FORM II

	Experimental Group		*Control Group*			
	Score	*Gain-Mos.*	*Score*	*Gain-Mos.*	*Difference*	*"t"*
Vocabulary	5.507	11.415	5.022	6.510	4.905	4.525***
Comprehension	5.229	8.603	5.264	6.614	1.989	1.791*
Mean Total	5.404	10.117	5.158	6.479	3.638	4.660***

* .05 level significance (one tail)
*** .001 level significance

POST TEST RESULTS FOR THE EXPERIMENTAL AND CONTROL SIXTH GRADE GROUPS—IOWA TEST—BASIC SKILLS—FORM II

	Experimental Group		*Control Group*			
	Score	*Gain-Mos.*	*Score*	*Gain-Mos.*	*Difference*	*"t"*
Vocabulary	7.719	11.773	7.198	7.771	4.002	3.272***
Comprehension	7.307	7.773	7.162	6.710	1.063	.807
Mean Total	7.494	9.835	7.135	7.000	2.835	2.814**

** .01 level significance (one tail)
*** .001 level significance (one tail)

While this pilot study of the effectiveness of teaching reading on the elementary level through the medium of television is not conclusive, several factors are clearly indicated which tend to favor the experimental or television classes. Pupil reaction indicates that the holding power of closed-circuit television over protracted periods of time with youngsters of the elementary level is very good.

Much more could be said about the new dimension in education called "talkback," and its effects on improving the feasibilty of total teaching via television to even the staunchest critics. We hope it will suffice to say, however, that we of the Division of Educational Communications feel more strongly as each day passes that instructional television and the talkback system have formed a powerful and inseparable team.

The Classroom Teacher— ETV's Forgotten Learner

(Continued from page 109)

These should include the simple process of permitting, even insisting, that the television teacher and the classroom teacher become acquainted with each other, both in a professional and social relationship. Everyone involved must realize that each has a vital role to play. The TV teacher and classroom teacher must become a team. There must be mutual confidence which cannot be conceived in the one-way street of the video tube.

There should be an opportunity for the classroom teacher to participate in the preliminary planning—course content, materials and resources to be used, concepts and ideas to be expressed, skills to be developed, teaching techniques, and procedures of methods and evaluation. There must be some basis of general agreement. The presentation of different points of view is desirable, but the impossibility of an effectively coordinated effort where various teachers work against each other should be apparent.

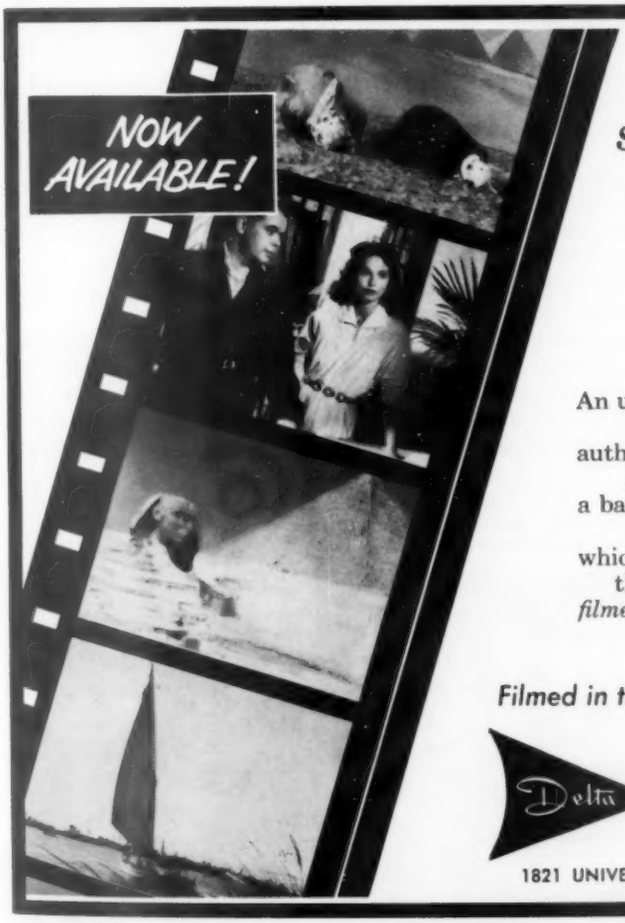
[Examples of cooperative planning between studio and classroom have been noted in past issues of this magazine, namely: KETC in St. Louis (June 1956); Greater Washington Television Association (November 1958); and Hagerstown (November 1959)]

The lines of communication should not be severed once the actual class sessions are underway. Frequent and periodic meetings must be arranged so that disagreement, confusion, and distrust can be eliminated. The primary consideration here is that the classroom teacher, if he is to function as both a learner and teacher, must not have his status as leader and director of learning imperiled. These safeguards can be best accomplished if the classroom teacher is made to realize the importance of his role in the total operation.

This article has been based on certain premises: Educational television as previously defined has an important place in education. The classroom teacher, as a learner, stands to gain as much from it as do his pupils toward whom it is primarily directed. Indirectly this educational gain for the teacher may be of even more importance than that of the pupils since the classroom teacher is still in the paramount position with regard to educational stimulation and will be in a position to influence many more classes in the future if ETV for one reason or another is unavailable.

The educational benefits to the regular classroom teacher are not a matter of course. Their occurrence depends upon a mutual cooperation which in turn is affected by personality factors of which the maintenance of the status of the classroom teacher is most important.

The pupil is still the primary objective in our determination to make educational television succeed. We should, however, take steps to insure that the hitherto forgotten learner, the teacher, profits from our efforts. In the final analysis this may be a far more important consideration than those toward which most of the energy has thus far been expended.



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NEWS NOTES from the field

AV Ferment Traced to Title VII Conference

NEARLY 1000 administrators, supervisors, and teachers participated in three sectional conferences on the new educational media sponsored by the Utah State Department of Public Instruction during January and February. These conferences were a follow-up of a four-state meeting conducted in Phoenix just before Thanksgiving by DAVI and ASCD and coordinated by Harold Wigren and O. L. Davis.

As a result of his experience as head of the Utah delegation to Phoenix, E. Allen Bateman, state superintendent of public instruction, appointed 14 delegates to an advisory committee to implement the audiovisual program in Utah under the National Defense Education Act. Under his leadership, additional conferences have been planned for each of the 40 school districts in the state to enable every classroom teacher to be brought up to date on audiovisual methods, materials, and equipment.

[The Phoenix conference was the second in a series of regional conferences on the new educational media contracted for by the NEA under the Title VII dissemination clause. Lee Campion will replace Harold Wigren to work with Dr. Davis on future conferences in this series, the next of which is slated for Norman, Oklahoma, this month.]

The first of the "new media" conferences in Utah was conducted on the University of Utah campus the last weekend in January. Two concurrent meetings followed the first week in February—one in Ogden and one in Orem—serving the northern and southern sections respectively. Keynoting the first conference, Robert deKieffer, audiovisual director at the University of Colorado, reviewed the processes of how people learn, what it means to teach, and who is responsible for learning and teaching. Jim Finn, who has since assumed office as DAVI president, keynoted both February conferences, addressing himself to the application of technology to the educational process and suggesting the implication of this application for teachers and teaching.

Demonstrations included projected, non-projected, and audio materials and closed-circuit television. Cross-media demonstrations were offered by classroom teachers in nine different groups treating a variety of subject matter on many grade levels. Workshop meetings considered administrative problems such as the organization of an AV program, budgeting, inservice training, and the provision of physical facilities. Representatives from each district were given opportunities to get together as a team to plan ways in which programs in their individual districts could be implemented.

Conference overviews were given by Donald Brumbaugh, audiovisual director at the University of Utah and president of the Audiovisual Directors of Utah and by LeRoy Lindeman, chairman of the audiovisual department at Brigham Young University and past president of the Utah affiliate.

Still another follow-up was a three-day workshop on the preparation of materials for overhead projection sponsored by the Audiovisual Directors of Utah in Salt Lake City February 18-20. Cooperating with the Utah group and underwriting the workshop costs were the Deseret Book Company of Salt Lake City and Ozalid of Johnston City, New York. Eric F. Burtis, Ozalid's western regional manager and co-author of the Ozalid manual, *They See What You Mean*, conducted the sessions and acted as workshop director. Some 40 teachers and administrators attended.

—CONTRIBUTED.

San Jose Workshop

All types of instructional materials will get thorough scrutiny at a one-week workshop to be sponsored by the department of librarianship and the audiovisual staff at San Jose State College June 20-24. Heading a staff of library and audiovisual experts will be Mary Peacock Douglas, director of the Raleigh (North Carolina) school libraries. Joining her will be James W. Brown and Richard B. Lewis, co-authors with Fred Harcleroad of *AV Instruction: Materials and Methods*, and William Sanborn, director of instructional materials for the San Francisco public schools.

The conference, designed for audiovisual specialists, librarians, teachers, supervisors, and administrators, will include lectures, demonstrations, individual conferences and field trips. Extensive exhibits of all types of material will be available for browsing, listening and viewing.

For complete information write to: Richard B. Lewis, Head of Division of Audiovisual Services, or Leslie H. Janke, Head of Department of Librarianship, San Jose State College.

Demonstrations, demonstrations, demonstrations! Photos below from Utah are typical of the "audiovisual fairs" springing up in the wake of the National Defense Education Act and particularly as a follow-up of the dissemination conferences conducted under Part B of Title VII. L to r: Cross media approach to language arts, simply constructed science materials, non-projected materials, and the prototype of a teaching machine.

Dave Barnard Heads Up Masters Program At Stout State College

Dean Ray A. Wigen, Silas Stamper, and Dave Barnard (seated) shown at editing table used in preparation of the education motion picture made each year by Stout's audiovisual center.

THE THEORISTS STRIVING in the invitational seminar at Cincinnati last month to find a rationale for educating the AV professional will be heartened to know that curriculums were meantime hatching here and there across country despite doubts that occasionally cropped up among the seminarists' convictions.

One such curriculum has been announced at Stout State College in Menomonie, Wisconsin, where a program offering a master of science degree in audiovisual instruction is under way. Students entering the new graduate curriculum this year (1959-60) are under the guidance of David P. Barnard, professor of education, head of Stout's audiovisual center, and well known in DAVI circles.

Candidates must have taught a minimum of one year and are required to enroll in three basic courses: Research Procedures, Applied Research, and Educational Statistics. They are also required to obtain a minimum of eight semester hours from a list of 20 recommended graduate courses. Among them are Advanced Photography, Audiovisual Administration, Applied Electronics, Motion Picture Production, and such general courses as Curriculum, Conference Leading, Psychology of Learning, Supervision, and Administration.

Upon completion of Stout's $925,000 shop-laboratory-classroom building now under construction, the audiovisual center will move into larger quarters with facilities that will permit doubling the size of present classes. These facilities include a spacious darkroom with an adjoining "white-light room," an audiovisual laboratory for student equipment operation and graphic materials production, an audio studio, a motion picture editing and still-picture file room, an equipment storage and maintenance room for equipment used by instructors and student teachers at the college, two offices for AV instructors, a preview classroom and a standard classroom.

The master's program at Stout did not spring into being full-blown, officials there explain. The college already has nearly a quarter of a century of AV experience and since 1956 has been offering a minor in this field. It is also pointed out that virtually the equivalent of an AV major has been offered for years although the curriculum was not designated as such.

A Stout press release announcing the new degree states: "School superintendents, principals of elementary and secondary schools and other Stout alumni suggested that the audiovisual staff integrate its course as a graduate major in this specific field. These educators indicated that administrators prefer to employ an audiovisual specialist rather than have a regular classroom teacher 'grow' into the AV position while on the job."

When asked the value of the new master's degree, Ray A. Wigen, dean of graduate studies at the college, said: "A growing need and demand exist for qualified specialists who are prepared to assume the responsibilities of developing the audiovisual program in their schools. Our graduates will help to meet these urgent needs."

Dr. Barnard, director of the new graduate program, received his bachelor of science and master of science degrees from Stout and later earned his doctorate with a major in audiovisual instruction at Indiana University. He has been active in DAVI's college and university group. Associated with him will be Silas S. Stamper, assistant professor of education and former director of films and equipment exchange services for the Third Army Area, U.S.A.

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STILL FISHING FOR IDEAS?

A continuation of last month's share-the-best issue

Merle W. Vance

TRY PUPIL PARTICIPATION

SHARED RESPONSIBILITY in the teaching-learning process is illustrated when children bring materials to school that contribute to the instructional program. Most teachers recognize the value of these contributions and encourage pupils to collect pictures, models, specimens, and other materials. Sharing these materials brings children closer to the school program and gives them an opportunity to understand the common purposes that have been established.

It is generally thought that pupils are limited to materials obtained from the home or community. Yet, the accessibility and appropriateness of resources in the school's audiovisual center, if made available, will encourage even greater participation and will gear such materials closely to the instructional program.

The opportunity for pupils to select and use instructional materials in the classroom provides a valuable learning experience. With proper guidance pupils respond to this activity with high interest. Pupils and teachers planning together in this phase of the school program gives new perspective to pupil participation.

Having explored the possibilities of pupils taking part in selecting, ordering, previewing, and showing projected materials the writer can attest to the high motivation value and learning that result. A program of this type was implemented in Grades 1 through 6 of the Eugene Field School in Oklahoma City several years ago. As it developed, new techniques, procedures, and concepts of utilization emerged. Guided by their teachers in the use of the school audiovisual catalogs, children quickly accepted the responsibility for proper selection, making their choices from title descriptions. Previewing in committee was probably the most valuable part of the program.

Films were utilized in several ways. In screening selections for reports and class discussion, pupils learned to organize research data and to develop means of identifying points important to topical outlining. At the same time they gained information relative to the topic. Films were also used to illustrate reports, resulting in an increased desire on the part of pupils to prepare and give reports. The reports were also better organized and captured the interest of the audience through both visual and auditory means.

In order that films delivered to the school might be evaluated in terms of usefulness for other classes, the titles and descriptions were circulated to all classes on delivery days. This enabled preview committee representatives to visit other class showings. It was not unusual to see third graders "sitting in" on a fifth-grade film that might be suitable for either grade.

Primary classes were given closer guidance and direction, but also became involved in selecting, ordering, previewing, and using films, filmstrips, and slides. It was a "big" day when members of the first grade brought their orders to be placed in the school mail, and they eagerly awaited the arrival of *their* films.

The author is assistant professor of education at Sacramento State College.

Charle P. Roland

LET STUDENTS DISCOVER THE AV POTENTIAL

THE AUDIOVISUALIST who is an instructor at a school or college can often sell his program through his students. Students may not come in direct contact with administrators, but they will be associated with instructors in other areas who no doubt will have close associations with administrators. Sometimes one word from the right person will sell an idea. The teacher can almost always count on enthusiastic response from her students. When responsibilities are thrown upon them they will put themselves wholeheartedly into classroom presentations. They thus become exposed to the potential of audiovisual materals and at the same time gain more from the class session.

One good way to effect this situation is through group reports. In group reporting the student learns to cooperate with others. He knows he must carefully read his basic text before he attempts the resource study. At the outset I tell my class that they must not forget they are in an audiovisual class; therefore all reports must be visualized as much as possible. As this is a somewhat new experience for students there is much rivalry to see which group can produce the best visualization. Since most of the students plan to teach, the reports are presented from that point of view—that is, they are presentations that can be used in their own prospective classrooms.

In our college we do not mix elementary and secondary majors in the audiovisual course. Elementary majors take the course the first semester and secondary majors the second semester. With a group of secondary majors there are varied interests, such as mathematics, biology, chemistry and social science. In a recent class the bulk of students were mathematics majors. Since they were seniors (the audiovisual course is given only to seniors) they were eager to give presentations that would help them in their student teaching and help build up resource materials for their inservice teaching.

One group took as its project "The Pythagorean Theory," using several methods of presentation—film, feltboard, and chalkboard. All three were integrated to help make the idea clear. All of the students benefitted considerably from these three learning experiences, which, moreover resulted in a conclusion that there is more to AV than the motion picture.

Another group chose "teaching with the feltboard" for its project. Most of the report was concentrated on teaching fractions. Being secondary majors this group would have preferred not to teach simple fractions but they considered the possibility that they might not be placed in a secondary school for their first teaching assignment.

A third group of mathematics majors chose to construct an electric board and demonstrate its use by converting the unit of ten into the unit of four. Their motive was twofold: to show the class that the conversion is possible and also to supply an element of fun as classmates tried to make the buzzer go off signifying they had hit upon the correct answer. [On an electric board the questions are placed on one side and the answers on the other. When the student places the wire (which is connected to a question) on the correct answer, the buzzer sounds.] [The construction of the electric board could be a project for a physics class as well as an audiovisual class.]

This brief report suggests what students can and will do to help enrich classroom procedures if given the opportunity. It also might inspire audiovisualists and other teachers to consider student interest when making up syllabi for courses. Interesting learning experiences can be correlated with the basic text if time is taken to think through the many possibilities of capitalizing on talents found in every classroom. Nor will the values inherent in the learning experiences be lost to these students who soon will face their own classroom situations.

Mrs. Roland is audiovisual coordinator at LeMoyne College in Memphis, Tennessee.

looking at

new literature

Schofield Recommends British Film-Making Book

The Technique of Film Animation, by John Halas and Roger Manvell. Communication Arts Books, Hastings House, 151 East 50th Street, New York 22. 1959. 348 p., $10.

In a specialized resource book Halas and Manvell treat comprehensively all animation techniques for film and television. In it are explained the aims, methods and organization of making animated films for entertainment, instruction, advertising, and research. As one of a series of books on film-making sponsored by the British Film Academy, this highly illustrated and detailed manual includes material on color systems, sound tracks, TV commercials, advertising films for theaters, propaganda and public relations, experimental and *avant-garde* films, storyboards, cartoons and puppets, as well as silhouette and flat-figure animation.

There is a truly international flavor throughout, since illustrations are drawn from not only the United States but also Great Britain, Canada, France, Italy, Poland, Czechoslovakia, Russia, China, and Japan. All stages of the creative procedure of animation are shown through appropriate illustrations.

The appendices are especially useful, including data of significance. For example, Appendix I records the answers of representative and experienced producers and directors such as Gene Deitch, Joy Batchelor and Philip Stapp to such questions as: "Do you think the use of the cartoon film is expanding?" or "To what extent do you think the storyboard should be developed prior to production?" Appendix II is entitled "Mathematics in Aid of Animation," by Brian G. D. Salt. The "Glossary of Animation Terms" should prove an invaluable aid to reading the book and further help as a future reference tool.

A final word relates to the authors who are responsible for this carefully assembled guide. John Halas, with his wife, Joy Batchelor, is the head of Halas and Batchelor Cartoon Films, Ltd., and Roger Manvell, who has been for the past 10 years director of the British Film Academy, is now the administrator of the Society of Film and Television Arts in London, and is well known for his many published writings on the film media.

They See What You Mean: Visual Communication with the Overhead Projector, prepared by James E. LeMay and Eric F. Burtis with illustrations by Owen Finstad. Ozalid Audiovisual Department, Division of General Aniline and Film Corporation, Johnson City, N. Y. 1959. 88 p., $3.75.

This excellently illustrated book is an expert and effective tool for the audiovisual educator's library. More than that, it will be a constantly consulted manual for all teachers who plan to make the best use of that important visual communication tool—the overhead projector. Beginning with the "whys" of overhead projection, the user progresses from basic principles of utilization to the skills of making transparencies by hand—the sketch transparency, cutout visuals, mechanically produced transparencies, and photographic transparencies. The diazo process is presented in step-by-step demonstrations making a reality of the slogan: "Creating color is as simple as 1, 2, 3."

The process of transferon is graphically portrayed with equipment and vital steps illustrated in detail. Techniques for mounting transparencies are developed with the idea of stimulating the user's thinking and imagination in determining the exact visualizing method for his specific presentation. The chapters on transparency design cover simply stated rules and tools needed for the job. Finally a section on "Ideas and Applications" stimulates the imagination with examples drawn from teaching grammar, copying music, proper golf stances, and student profiles based on test scores for group analysis.

"They see what you mean" is a demonstrated fact in this handbook.

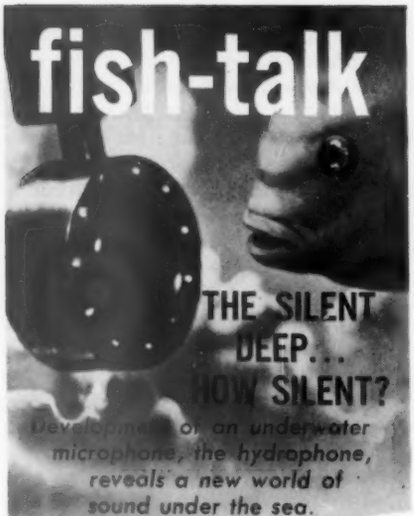
A Year's Program of Audio-Visual Units and Projects, by Rae Bragman. Publications Department, Union of American Hebrew Congregations, 838 Fifth Avenue, New York 21. 1959. 230 p., $3.

In this teaching guide designed for principals, audiovisual supervisors, and teachers are presented 22 class projects for all grades of the Jewish religious school. Illustrated with 31 full-page photographs and supplemented with reading and audiovisual bibliographic aids, the manual is of great help to religious educators who may be setting up an audiovisual program in the school or revising present programs to make audiovisual aids more effective. All grades from the kindergarten to the Confirmation class are included in the handbook. Each chapter is written by the teacher or teachers who organized and conducted the experiences during an entire school year.

The emphasis throughout is rightly on utilization techniques which were experimentally conducted in a "pilot" school, the religious school of Temple Israel in New Rochelle, New York. As a result of the endeavor, the manual emerges as a "compendium of excellent pedagogic suggestions for all subjects of the curriculum and for all age levels in the religious school."

Sound Teaching: Have Language Laboratory, What Now? by Gustave Mathieu. Educational Division, Magnetic Recording Industries, 126 Fifth Avenue, New York 11. 1959. 16 p., $1.

The sub-title, "A Brief Guide to Effective Labmanship," states concisely the purpose of this pamphlet. Mathieu divides laboratory programs into three categories: (1) integrated, (2) independent, and (3) mixed. Whatever the method, the teacher is cautioned to create a program which has "continual variety, change of pace, and the creation of anticipation." Four basic types of exercise for laboratory practice are described: (1) audio-passive (also known as listening-comprehension practice) which seeks to develop the learner's ability to understand the spoken language by ear alone; (2) audio-active which develops the learner's ability to express himself in everyday conversation and the perfection of his pronunciation; (3)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audio-creative exercises wherein fluency in using the foreign language by the student is the aim; and (4) audio-evaluatory exercises where the primary purpose is to give the learner the opportunity to compare his speech habits with the perfect model. A quick reference guide for choosing the "right" laboratory is appended.

"The High School Library as a Curriculum Materials Center," by John J. Farley. *Clearing House* 34: 134-35, November 1959.

In a brief article the curriculum specialist of Sewanhaka Central High School District, Floral Park, New York, answers these questions: "Who is the logical person on the secondary-school staff to manage (that is, to acquire, handle, store, and distribute) such learning helps as audiovisual materials, maps, globes, charts, pictures, prints, models, posters, resource books, and inexpensive sponsored materials? Is it the AV expert, curriculum consultant, director of instruction, librarian, or some other staff member?" The author's analysis involves several important facets of the problem such as redefining the term "library materials" and the attitudes of the librarian.

—EDWARD T. SCHOFIELD

Have You Seen These?

The Feasibility and Role of State and Regional Networks in Educational Broadcasting, edited by Betty McKenzie. National Association of Educational Broadcasters, 257 pages. Free from the Educational Media Branch. Proceedings of the conference conducted by NAEB in September 1959 under a Title VII contract.

"Music Education Materials — A Selected Bibliography." Spring issue of the *Journal of Research in Music Education*. (Vol. VII, No. 1) 1959, $3. 16-page section on audiovisual aids. Write to Music Educators, 1201 16th St., N.W., Washington 6, D. C.

Language Laboratories and Modern Techniques of Teaching Foreign Languages. The Connecticut Audiovisual Education Association, Annual Bulletin No. 19, 1959-60, 186 p., illustrated, $2. Order from Educational Film Library, 250 West 57th St., New York 19, or Yale University Audio-visual Center. Twenty-one articles by supervisors of language laboratories and other language educators.

Educational AM and FM Radio, and Educational Television Stations, by State and City, prepared by Gertrude G. Broderick. U.S. Office of Education, Washington 25, D.C. January 1960. Revised listing. Free from the Educational Media Branch.

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Bob Burgert's Film Parade

Africa's Wild Life Sanctuary (Paul Hoefler Productions, 1122 Kline St., La Jolla, Calif.)

This film takes the viewer by motor car through Kruger Park, Africa's wild animal showcase. In addition to a variety of big game animals such as giraffe, hippo, wildebeeste, zebra, lion, and various species of antelope, the camera captures many of the unusual and colorful birds that are native to this region. Camp and administrative facilities in the park are stressed. A beautiful film, suitable for all age groups. (400 ft, color, $100)

Greenland's New Life (Arthur Barr)

The film explains the influence of this ice-covered land mass upon world exploration, travel, and history. Life in Greenland, long one of isolation enforced by the country's rigorous climate and limited productivity, is slowly changing as Greenland's people emerge into a modern world. General patterns of life and native customs are stressed. This is a film of beauty which represents careful documentation and an intelligent understanding of Greenland's people. (400 ft, color)

History

Navy Decline: The New Navy and the War With Spain (United World Films)

Although the title and much of the content would indicate that this is primarily a film tracing the history of the navy between the end of the Civil War and the termination of the Spanish-American War, it is actually an excellent vehicle to follow the emergence of this nation as a world power in the second half of the 19th century. The need for new types of vessels, coaling and repair stations to serve our navy and merchant marine, and the realization that world trade was important led to a series of incidents that resulted ultimately in the Spanish-American War, the annexation of Hawaii, action in the Philippines, and the construction of the Panama Canal. Behind these events is Mahan's concept of sea power and security. This is history from a fresh viewpoint. (600 ft, color)

Medieval Guilds (EBF)

This film shows how a medieval village developed into a center of trade and analyzes the factors which brought it about. The craftsman is pictured as he bargains with his lord for the right to trade. In time these craftsmen organized themselves into self-regulating economic bodies according to their trades. The film shows the hierarchy of apprentice, journeyman, master, and warden, and defines the rights and duties of each. Finally, the film brings out how chartered or free cities grew out of this system and became the seeds of self-government. Excellent for the study of world or medieval history. (800 ft, color)

Miscellaneous

Mathamagic Land —Donald In (Walt Disney)

Probably Galileo, Euclid, Copernicus, and Einstein would question Donald's credentials to teach more intricate mathematical concepts; however, he does a fine job of demonstrating the relationships between math and music, and nature and art. The mathematical aspects of chess, baseball, football, and other sports are exceedingly interesting. The golden section and the golden rectangle are emphasized, but cones, spheres, and cylinders also receive notice. Major thesis is that mathematics helps us understand and solve the problems of nature. The better-than-average and highly inquisitive student will relish this production. (26 min, color, $250 extended lease)

Toot, Whistle, Plunk and Boom (Walt Disney)

Undoubtedly the music teacher who believes that his art is without humor will be shocked by the light and casual treatment given to the history of music. Basic thesis is that all music is either a toot, a whistle, a plunk, or a boom, and with an able assist by early man, Disney proceeds to hypothesize how our modern instruments may have come to be. The typical Disney whimsy may embarrass the purist but will hold interest and appeal to the imagination of those who are willing to speculate. (400 ft, sound)

Milestones in Writing (Classroom Film Distributors, Inc., 201 N. Occidental Blvd., Los Angeles 26)

In this series of six ten-minute films, Frank Baxter, noted TV and film teacher and lecturer, traces the various methods and devices developed by man to record and communicate his experiences. Although basically an illustrated lecture, each film has elements of experimentation that give meaning and create interest. Titles are: Pictograph, Alphabet, Papyrus, Paper, Manuscripts, and Printing. (color, $100 per print)

Something to Write About (McGraw-Hill)

This film should help the teacher or child who is having difficulty finding subjects for written and oral reports. It analyzes the types of situations that stimulate interest and the ingredients that are usually found in a good story. A convincing script gives the film just the right slant to make it valuable to upper elementary and junior high students. (400 ft, b-w)

Manners in Public (Young America Films)

Barbara finds it difficult to make and even harder to keep friends. She is rude to her mother, shows discourtesy on the bus, is noisy in public, and disturbs others at the theatre. After she learns through a friend how much she offends others, she builds a new code of behavior to improve her manners. Will be convincing only to the younger child. (400 ft, b-w)

Growing Up Day by Day (EBF)

Bill celebrates his eighth birthday with a party. His invited friends show considerable variation in physical, social, and emotional development. The film points up the importance of exercise, rest, and proper foods to the growing process. It also explains that growing up involves responsibility for one's behavior. Although some chil-

dren can profit from this film, it probably will serve parent education and health education classes most effectively. (400 ft, color)

What Do Fathers Do? (Churchill-Wexler)

This film gives the primary child an opportunity to spend a day with a construction worker. Not only does he learn what kinds of work construction men do, but he also observes enroute that other "fathers" work in stores, deliver products, sell things that people need, and so forth. (400 ft, color, $100)

Water for the Farmer's Fields (Classroom Film Distributors)

The importance of water and irrigation to the farmer and those who depend upon his products is emphasized. Various methods of irrigation are explained and the systems of dams, canals, and aqueducts that bring water from the mountains or from underground sources are reviewed. Good photos and narration make the film comprehensive to the elementary school student. (400 ft, color)

Filmstrips

Farm Fathers (Lang Filmslide Service, El Cerrito, Calif.)

A series of five colored filmstrips designed for use in the primary grades. Major concepts treated are how farms are operated, their importance to our way of life, the need of food, water, and sunshine for plant and animal growth, and the kinds of labor and machines required to produce crops. ($22.50 for series of five)

Signs We See (Lang Filmslide Service)

A series of five filmstrips in color that can be used in a variety of teaching situations. Elementary teachers especially will find them of value. Also profitable for junior and senior high students needing remedial reading help. Driver education instructors will see many opportunities for their use. Titles are: Information Signs, Parking Signs, Warning Signs, Driving Signs A, and Driving Signs B. ($22.50 for the series)

The Story of the Universe (Films For Education, Audio Lane, New Haven, Conn.)

Current interest in astronomy and its relationship to space travel and exploration make this series of filmstrips timely. The first of four units on this topic, it contains six filmstrips that analyze the relationships between the earth and the moon and the most salient characteristics of each. Other units planned are: *The Solar System, The Stars,* and *The Universe.* ($36 per unit of six filmstrips)

CITIZENSHIP FILMSTRIP: Posing before the story-board of a new NEA filmstrip on teacher citizenship are three contributors to the project. They are (l to r) Mrs. Lucile Ellison, NEA staff contact to the Citizenship Committee; T. M. Stinnett, NEA's secretary for Professional Development and Welfare and a consultant to the Committee; and Committee Member Andrena Briney, a Tennessee teacher and former contributor to this magazine. The ten-minute filmstrip which will be premiered at the NEA Convention in Los Angeles is a call for more active political participation by teachers. This is also in line with the thinking of many DAVI leaders as exemplified by Dr. Schuller's presidential address to the Seattle Convention last year and by this year's resolution calling for federal support. The filmstrip will be available in July.

NEWLY REVISED!

"HOW TO MAKE GOOD TAPE RECORDINGS"

by C. J. LeBel, Vice Pres., Audio Devices, Inc.

This completely revised handbook of tape recording contains up-to-the-minute information of practical value to *every tape recordist.* Profusely illustrated with photographs, charts and diagrams, it contains 150 fact-filled pages.

"How To Make Good Tape Recordings" can be read and easily understood from cover to cover by an amateur recordist. Yet it contains a wealth of practical information that makes it a valuable aid to experienced teachers and musicians.

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McNamara Bill Carries AV Amendment Proposed by NAVA

THOSE AUDIOVISUAL WATCHDOGS on Capitol Hill—Don White and his NAVA headquarters staff—have done it again.

According to *NAVA News* of February 15, the McNamara Bill providing Federal support for school construction and teachers' salaries (see March AVI, page 66) includes an amendment proposed by NAVA which will permit expenditures of school construction money for audiovisual materials and equipment.

The bill defines the word "construction" to include the acquisition of school facilities and defines school facilities to mean "classrooms and related facilities (including furniture, instructional materials other than textbooks, equipment, machinery and utilities necessary or appropriate for school purposes) . . ."

"This wording which was inserted at the request of NAVA," says *NAVA News* "would make it possible to purchase necessary instructional equipment and materials as a part of the cost of building a school building. It probably would also be possible to purchase necessary instructional equipment and materials alone—when not connected with a new building—but this will have to be clarified later."

To recall the provisions of the McNamara bill (S8): It would set up a two-year program providing $916 million for the first year, and $939.5 million for the second year, to be spent by states for construction of school facilities, or for the payment of teachers' salaries, or both (the state chooses). No matching by states the first year; matching the second year is required only to the extent that the state must increase its general school expenditures in order to qualify for federal funds. An appropriation of $20 per child of school age would be authorized. [The information above also is from *NAVA News*.]

EDITOR'S NOTE: As this issue goes to press the NEA Legislation Division reports that the Thompson bill has left the House Education and Labor Committee for the Rules Committee before moving to the floor for debate, amendments, and a vote. (The bill still would authorize appropriations of $325 million for each of the next three fiscal years for school construction only.)

As things stand now, the NEA is lobbying for an amendment on the floor which would substitute HR 10764 for the Thompson bill. The substitute bill (introduced by Metcalf of Montana) is identical to the McNamara bill which passed the Senate February 24 to include both construction and teachers' salaries.

In the meantime Don White reports that the House Committee voted to eliminate the words "instructional materials other than textbooks" from the definition of "school facilities" in the construction bill. The wording left in the bill does not necessarily preclude audiovisual equipment, according to Mr. White who says this would depend on interpretation.

The NEA is calling on members to write their congressmen urging substitution of the Metcalf bill for the construction only bill. Meanwhile Don White has written NAVA members that he will continue working for reinstatement of the instructional materials wording, regardless of what form the final legislation may take.

Title VII Activities

SIX MORE RESEARCH PROPOSALS and four dissemination contracts have been announced by the New Educational Media Branch since AVI's report in March. These are:

Research Grants

DENVER PUBLIC SCHOOLS AND STANFORD UNIVERSITY: Four years of research on the context of instructional television.

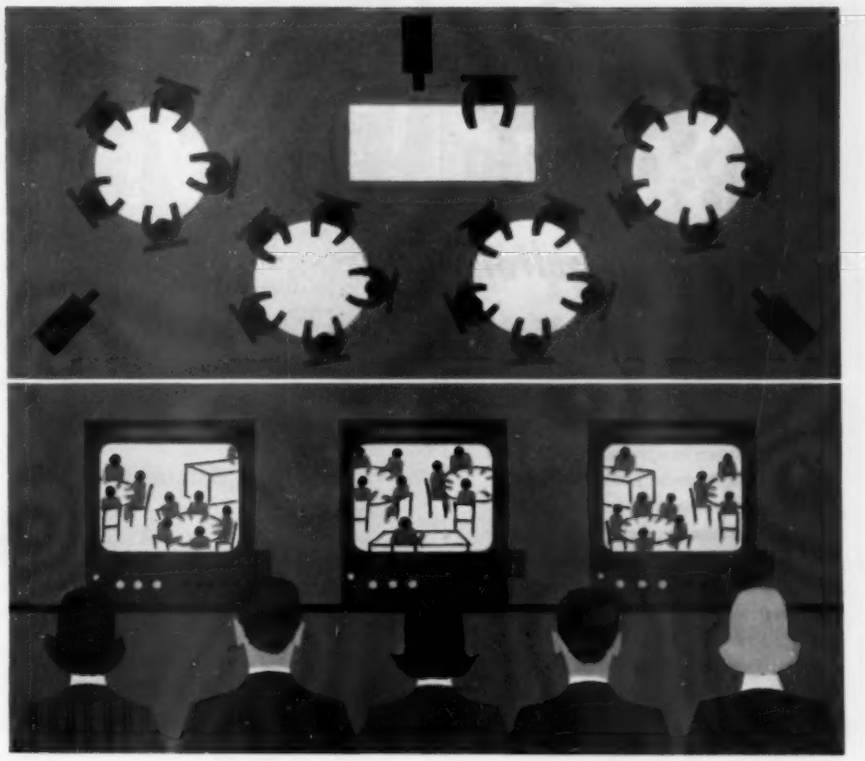
FLORENCE STATE COLLEGE, FLORENCE, ALABAMA: An experiment in the eradication of adult illiteracy by use of TV instruction over a state educational television network supplemented by supervised group viewing and by the related use of project-supplied materials of instruction.

OHIO UNIVERSITY, ATHENS: An investigation of motion picture film and the program analyzer to improve TV teacher training.

(Continued on page 124)

HI-FI SOUND EFFECTS

Newest sounds — airplanes — DC8 — Electra prop-jet — Boeing 707 — Air Force F-104 Starfighter — Regulus I — missile launching —carrier sounds — also autos — music — trains — household —industry. More than 12 classifications; over 1500 real-life sound effects. See your dealer or write today for FREE 32-page Catalog. MP-TV Services, 7000-D Santa Monica Bl., Hollywood, Cal.



Demonstration of Teaching Methods Facilitated by Closed-Circuit TV

Educators are well acquainted with the methods of instructing student teachers: actual visitation to elementary classrooms and observation of model classrooms from balconies equipped with one-way glass partitions. While both methods have advantages, there are also certain limitations or objections to each. Classroom visitations are distracting to elementary pupils and their teachers. Model classrooms with mezzanine observation points are very costly to construct, and also limit the area for observation.

Many colleges of teacher education are overcoming the basic problems of classroom observation through the use of Dage television systems. While the physical layout of educational buildings will determine to some extent the type of equipment and system to be used, the one as diagrammed above is symbolic.

Dage cameras cover the entire classroom area. Each of the cameras can be remotely controlled from the observation room. In this room student teachers and their instructor observe the demonstration teaching on television receivers. Thus observation and interpretative discussion can go on without distracting classroom procedures.

As a pioneer in the field of ETV, Dage Television has worked closely with educators to develop a wide range of systems and equipment for educational purposes. The teacher training system is but one example. Each institutional requirement is treated as a special installation with the equipment system being customized to meet local need.

When considering your requirements for closed-circuit ETV, request the consultation of a Dage representative. He is well qualified to discuss and advise on all phases of ETV. Write for complete information about Dage television cameras and systems for every educational purpose. No obligation, of course.

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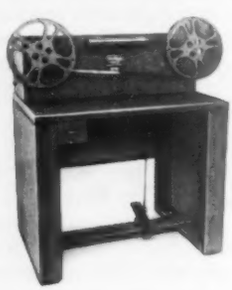

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UNIVERSITY OF ARIZONA, TUCSON: A test to determine the effectiveness of motion pictures with sound for teaching subject matter which cannot be directly portrayed in visual images.

UNIVERSITY OF CALIFORNIA, LOS ANGELES: The effects of mental retardation on film learning—a study to determine what types of instructional film experiences are meaningful to mentally retarded children enrolled in public schools.

UNIVERSITY OF SOUTHERN CALIFORNIA, LOS ANGELES: A study of the non-linearity variable in filmic presentation.

Dissemination Contracts

PORTLAND STATE COLLEGE, PORTLAND, OREGON: A guide for planning school buildings for the use of modern teaching aids. (See additional note, page 98.)

SACRAMENTO STATE COLLEGE: A pilot regional conference on research needs and uses pertinent to the new educational media.

THE AMERICAN UNIVERSITY, WASHINGTON, D. C.: Development of a selected bibliography on educational radio and television.

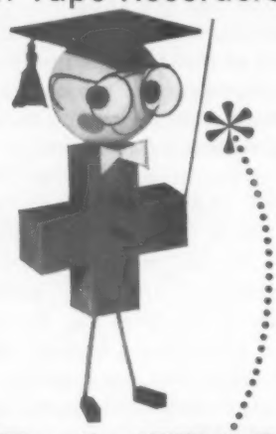
UNIVERSITY OF COLORADO, BOULDER: A pilot regional conference on new educational media (research needs and uses).

These latest additions bring the approved list under Title VII up to a total of 81 grants for research and experimentation, and 23 contracts for dissemination activities, according to the February issue of *News and Reports*, which also reports that permanent deadlines for submission of proposals for research grants have been set by the Advisory Committee as February 1 and August 1. These dates also hold good for the small grants program reported in these columns last month. The program, designed to encourage young researchers, provides grants not to exceed $2500 for research on ways in which new media may be used in the teaching-learning process. Duration of each project is limited to one year. Applications should be submitted on the standard Title VII Application Form (NDEA-VII-1. Rev.) on or before the established dates.

Spaulding Appointment

News and Reports also announces the appointment of Seth Spaulding as consultant to the New Educational Media Branch. Dr. Spaulding, recently executive director of the National Committee for Adult Literacy, has been a frequent contributor to *AVCR*.

NEWS! In Teaching and Self-Training With Tape Recorders!



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CINE Boasts Four Winners at Padua

FOUR CINE entries in the 1959 International Exhibition of Scientific-Didactic Films, held in conjunction with the University of Padua, were awarded medals, three of them silver and the fourth, a bronze. (CINE is the Committee on International Non-Theatrical Events which screens non-governmental films for selected festivals abroad.)

The *Bucranio d'Argento* was awarded to: "Rhythmic Motions of Growing Plants," produced by William M. Harlow; "Fire and Explosion Hazards from Flammable Anesthetics," produced by Mervin LaRue and sponsored by Abbott Laboratories; and "Life of the Molds," produced by Affiliated Film Producers and sponsored by Chas. Pfizer and Company.

The *Bucranio di Bronzo* was awarded to "Dynamics of Phagocytosis," produced by Campus Film Productions and sponsored by Pfizer International.

The producer of the first-named film and the sponsors of the other three donated prints of their respective films to the Film Library of the University of Padua in what Harold Wigren, former coordinator of CINE, termed a "gesture of good will that will make an enduring contribution to the dissemination of information on the international level." —J.R.F.

Workshop on Airborne TV

Airborne television will receive major attention during a conference and workshop in educational media at Indiana University, June 27-July 1. Lectures, demonstrations, and group discussions will deal with such specific aspects of airborne ETV as (1) plans and possibilities, (2) the nature and role of the medium as an instructional resource, (3) classroom application, (4) program information, and (5) demonstrations of actual educational uses.

The conference and workshop are designed for principals, supervisors, classroom teachers, AV coordinators and school and community leaders such as school board members, PTA members, and staff members of state departments of education. The conference will be open free of charge to interested persons on a no-credit basis. Credit can be earned by spending the additional three days in the workshop. L. C. Larson is chairman of the committee in charge.

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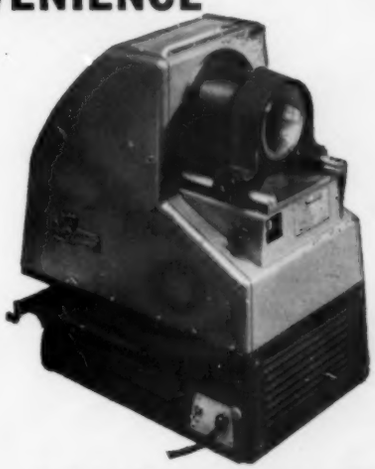

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Personal Notes

VERNON BRONSON has resigned as director of radio and television education for the Dade County school system for health reasons. His position will probably not be filled until next September, according to Joe Hall, superintendent of Dade County schools. In the meantime a committee will handle programming and operations. Mr. Bronson has been asked to remain available for consultation.

ROBERT O. HALL, formerly program associate for the National Educational Television and Radio Center, has accepted an appointment as professor of education at Alameda State College. This is the new California college of which Fred Harcleroad is president.

R. A. PETRIE, who as audiovisual director for the Milwaukee public schools, was active in DAVI's "large city" occupational interest group, appeared at the Convention in a new role this year. He is consultant for Visual Education Center, Inc., Dubuque, Iowa.

The *Edpress Newsletter* of February 13 cited the birthday of EDGAR DALE's *News Letter* which marks its 25th anniversary this year. Dr. Dale, says *Edpress*, has prepared a series of radio broadcasts for NAEB using essays from the *News Letter*.

Panamanian AV Course

Three-week extension courses were given this month and last in three different locations in the Republic of Panama under the direction of Galileo Patino. Mr. Patino is audiovisual technician for the Inter-American Service for Agricultural Cooperation in Panama.

The purpose of the courses is to train extension workers in the use of audiovisual materials, including press, radio, personal interview, and recordings. Tentative subjects to be covered are: the importance of visual aids in agriculture; flannel boards; chalkboard; portable exhibits; graphic portfolios; bulletin boards; and, how to organize a good agricultural department of information.—*From material translated from the original Spanish by Virginia G. Sturwold.*

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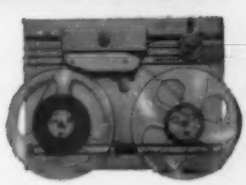
Transistors add many extra advantages to RCA's new "Preceptor" System—providing instant action, longer life, simpler wiring, and lower operating costs. These are but a few of the superior features RCA sound engineers have designed into the "Preceptor" to make it the world's most advanced and most wanted language laboratory system.

Write for complete information package explaining how RCA "Preceptor" System can vitalize your language curriculum. Also, ask for the name of your nearest RCA Language Laboratory Dealer. Address: Radio Corporation of America, Language Laboratory Sales, Building 15-1, Camden 2, N.J.

The RCA "Preceptor" console (above) with its master control panel puts the teacher in complete command. It allows: 1) monitoring of any student; 2) listening in on master tape and student's voice; 3) two-way conversation with any student; 4) recording of student on central tape recorder; 5) insertion of comments on the recording; 6) communication with whole class through "all-call" control. The teacher controls tape selection and can play up to 10 different tapes.

Sturdy RCA "Preceptor" booths can be installed singly, with or without flip-top desk to serve as writing surface, or in modules of two or three attractive economy booths.

World's Most Advanced Components . . . from RCA!



Expansion? Just add a pre-wired SelectorCom panel with a bank of 10 selector switches.

RCA tape decks for the "Preceptor" System may be either half-track, or dual-track. Single-knob control makes them ideally simple to operate at the console or in student booths, as a program source or for student recording. Convenient new cartridge type tape decks are also available.

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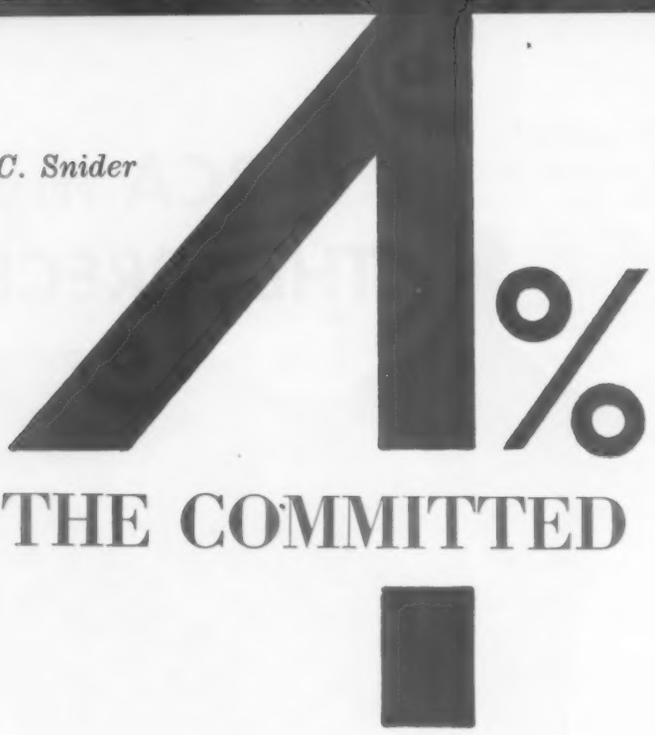
EDITORIAL | *Robert C. Snider*



THE COMMITTED

SINCE THE FIRST TRIBE of cave dwellers appointed four men to secure a boar for their next feast, committees have been doing specialized jobs that could not be done as efficiently nor as well by the larger groups to which they belong. It is also true that committees sometimes become eternal resting places for difficult problems and that they have a tendency to proliferation and self-perpetuation.

Speakers have traditionally found in the committee a rich source of humor. We heard a recent example of this in Cincinnati where someone defined the committee as "a group of people who get together for the cross-sterilization of ideas."

Despite their humorous side and their obvious limitations, committees have become an increasingly important part of our society. We might say they have become a convention, custom, or common practice, and further, that they are essential to accomplishing the objectives of any organized group of more than a few individuals, as witness the Congress of the United States where a complex committee structure plays a most important role in our form of government.

DAVI is no exception. Committees have always played an important role in our organization, and with our recent growth in membership, DAVI Committees have become committed to a wider range of responsibilities than ever before. Although most of the work of DAVI is accomplished by its communities, it is interesting to note that at the present time fewer than four percent of our members are serving on committees. We in the national office are not certain what this interesting statistic means.

Perhaps more DAVI members would like to be involved in committee activities. It was this question that prompted us a few months ago in this magazine to ask all members interested in committee assignments to write us. Everyone who answered this invitation was duly appointed by the President to the committee requested. But few wrote.

Perhaps we have too many committees now and too many people serving on them. This question, also, has been examined. During 1958-59 the DAVI Committee on Committees, under the leadership of Walter Bell, made an exhaustive study of DAVI committee structure and reported its findings to the Board in Seattle. As a result of this report several DAVI committees were abolished and others combined and reconstituted, and the total committee structure of DAVI was simplified.

It may be that in an organization of our size we should only expect to have about four percent of our members actively engaged in committee work. It seems obvious that a smaller proportion of membership on committees would not be adequate to carry on the program to which we are committed. It would further seem that nearly everyone in DAVI who is interested in a committee activity has already been appointed. Although we have not made a study of the four percent who are currently serving, we can make some generalizations concerning them.

DAVI committee members are willing to give a certain amount of their time, thought, and effort to some particular project in which they are interested and on which they are well informed. DAVI committees, over the years, have been a training ground for leaders in the audiovisual profession. We seem to have elected no officers who have not previously been active in committee work, and our former officers and past presidents—almost to a man—are currently active on one or more DAVI committees.

In Cincinnati we overheard a past president telling a new member, "The committees do the work of DAVI and it is only by taking an active part on a committee that an individual can effectively get his ideas quickly into action programs."

Those of us in the 96 percent owe a debt of thanks to the other four percent and perhaps we should raise the question—should it be six percent?

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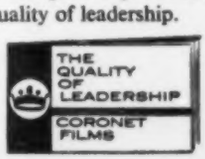

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